

ENVIRONMENTAL ASSESSMENT
for
RAYSTOWN LAKE RECREATION DEVELOPMENT
at
UPPER CORNERS

HUNTINGDON COUNTY, PENNSYLVANIA

U.S. ARMY CORPS OF ENGINEERS

BALTIMORE DISTRICT

APRIL 1996

CONTENTS

EXECUTIVE SUMMARY	ES-1
1.0 PURPOSE AND NEED OF THE PROPOSED ACTION	1
1.1 Introduction	1
1.2 Raystown Lake Project Description and History	2
1.3 Purpose and Need of the Proposed Action	3
1.4 Study Authority	4
2.0 DESCRIPTION OF THE PROPOSED ACTION	6
2.1 Facilities Proposed for Construction	6
2.2 Infrastructure Requirements	8
2.3 Site Planning Objectives	9
3.0 ALTERNATIVES CONSIDERED	10
3.1 The No-Action Alternative	10
3.2 Alternative A: Conference Center Development	10
3.3 Master Planning Alternatives Previously Evaluated	11
4.0 AFFECTED ENVIRONMENT	13
4.1 Project Area Description	13
4.1.1 Land Use	13
4.1.2 Geology	14
4.1.3 Soils	15
4.1.4 Topography and Drainage	16
4.1.5 Climate	16
4.2 Air Quality	17
4.3 Water Quality	17
4.3.1 Surface Water	17
4.3.2 Groundwater	18
4.4 Aquatic Resources and Wetlands	18
4.4.1 Aquatic Resources	18
4.4.2 Wetlands	19
4.5 Vegetation	19
4.6 Wildlife Resources	20
4.7 Threatened and Endangered Species	20
4.8 Prime and Unique Farmlands	21
4.9 Wild and Scenic Rivers	22
4.10 Cultural Resources	22
4.11 Hazardous, Toxic, and Radioactive Substances	23
4.12 Infrastructure	24
4.12.1 Utilities	24
4.12.2 Solid Waste	24
4.12.3 Traffic and Transportation	24
4.13 Socioeconomic Conditions	25

4.13.1 Demographics	25
4.13.2 Economics	25
4.13.3 Schools, Libraries, and Recreation Facilities	27
4.13.4 Public Health and Safety	28
4.13.5 Noise	29
4.13.6 Visual and Aesthetic Values	29
4.14 Environmental Justice	30
 5.0 ENVIRONMENTAL CONSEQUENCES	 31
5.1 Construction Suitability Review	31
5.1.1 Erosion and Sedimentation Control	31
5.2 Project Area Description	33
5.2.1 Land Use	33
5.2.2 Geology	34
5.2.3 Soils	35
5.2.4 Topography and Drainage	35
5.2.5 Climate	35
5.3 Air Quality	35
5.4 Water Quality	36
5.4.1 Surface Water	36
5.4.2 Groundwater	37
5.4.3 Stormwater	37
5.5 Aquatic Resources and Wetlands	37
5.5.1 Aquatic Resources	37
5.5.2 Wetlands	37
5.6 Vegetation	38
5.7 Wildlife Resources	39
5.8 Threatened and Endangered Species	39
5.9 Prime and Unique Farmlands	40
5.10 Wild and Scenic Rivers	40
5.11 Cultural Resources	40
5.12 Hazardous, Toxic, and Radioactive Substances	41
5.13 Infrastructure	41
5.13.1 Utilities	41
5.13.2 Solid Waste	44
5.13.3 Traffic and Transportation	44
5.14 Socioeconomic Conditions	45
5.14.1 Demographics	45
5.14.2 Economics	45
5.14.3 Schools, Libraries, and Recreation Facilities	47
5.14.4 Public Health and Safety	47
5.14.5 Noise	48
5.14.6 Visual and Aesthetic Values	49
5.15 Environmental Justice	49
5.16 Cumulative Impacts	50
5.17 Environmental Permits and Regulatory Compliance	51

6.0 CONCLUSIONS	52
7.0 AGENCIES AND INDIVIDUALS CONSULTED	55
7.1 Consultation	55
7.2 Public Involvement	55

	Page
APPENDIX A	Recreation Partnership Initiative Marketing Study
APPENDIX B	Cultural Resources Phase I Investigation Report
APPENDIX C	Calculation Assumptions for Acreage Requirements
APPENDIX D	Environmental Coordination and Public Notices
APPENDIX E	Environmental Compliance Table
APPENDIX F	References
APPENDIX G	Acronyms and Abbreviations (fold-out)

CONTENTS (continued)

Tables		Page
5-1	Standard Best Management Practices and Erosion and Sedimentation Control Techniques	33
5-2	Anticipated Trip Generation	44
5-3	Development Impact on Public Safety Resources	48
Figures		Follows Page
	Raystown Lake General Location	2
1-1		
1-2	Raystown Lake Project	3
2-1	Base Features	7
4-1	Soils	16
4-2	Slopes	16
4-3	Wetlands	19
4-4	Vegetation	19
5-1	Sensitive Resources	31

Environmental Assessment
for
Raystown Lake Recreation Development at Upper Corners
Huntingdon County, Pennsylvania

EXECUTIVE SUMMARY

The proposed action analyzed in this environmental assessment (EA) is the development of a conference center and associated facilities on the Upper Corners peninsula, located on the northwestern shore of Raystown Lake at Lake Navigation Marker 10, and possibly on some parts of the James Creek peninsula, south of the Upper Corners peninsula (Lake Navigation Marker 12). See Figure 1-2.

The proposed facilities could include the following:

- Overnight accommodations for up to 500 people, including conference center rooms, cabins, and lodges
- Associated facilities, such as an auditorium, several smaller meeting rooms, a lobby, shops, food service areas, health spa, and administrative offices
- Golf course
- Enclosed swimming pool
- Tennis courts
- Multipurpose play area
- Ice skating rink
- Outdoor amphitheater

- . Boat dock for transient use

The proposed action will directly affect the land use, soil, topography, and vegetation of a small part of the Upper Corners site. The proposed boat dock may affect emergent shoreline wetlands. Existing wildlife resources will be affected when continuous habitat is disrupted by clearing for facilities, roads, and infrastructure. Edge habitat will increase and may favor deer and small mammals over interior-dwelling species. Threatened and endangered wildlife species could be affected by increased human activity in this currently remote area. The shale barrens community could be affected by development above the barrens or increased pedestrian traffic.

Effects on natural resources will be prevented or minimized by careful facility siting and implementation of best management practices (BMPs) for erosion and stormwater control. Other actions that may be taken to prevent or minimize effects include minimizing the size of construction areas, clustering facilities, siting facilities at the bottom of slopes, siting facilities in successional rangeland, and limiting the proposed facilities to one peninsula.

The proposed action will result in beneficial economic effects. During the construction phase, construction employment and expenditures for materials and supplies are expected to result in a short-term minor increase in economic activity in the Raystown Lake region. The conference center will result in long-term direct, indirect, and induced increases in economic activity by creating new jobs on the site and by attracting more nonresident visitors to the region. The Upper Corners project is likely to account for a substantial part of the increased economic activity to be realized with the full implementation of the Raystown Lake Master Plan.

This EA concludes that the proposed development of Upper Corners will not result in significant adverse effects on the natural or human environment if the appropriate mitigation actions documented in the EA are taken. Therefore, this EA satisfies requirements for compliance with the National Environmental Policy Act, and a "Finding of No Significant Impact (FONSI)" has been prepared.

WDCR978/033.DOC

1.0 PURPOSE AND NEED OF THE PROPOSED ACTION

1.1 Introduction

In accordance with the National Environmental Policy Act (NEPA), this environmental assessment (EA) has been prepared to document the potential impacts associated with the proposed private-sector development of public recreation facilities on the Upper Corners peninsula of Raystown Lake. The potential impacts include those associated with the proposed construction and operation of a new conference center, lodging, and recreational amenities at the Upper Corners site. Development is proposed under the Recreation Partnership Initiative (RPI) of the U.S. Army Corps of Engineers (COE), Baltimore District, and in accordance with Section 318 of the Water Resources Development Act of 1992.

Raystown Lake is a U.S. Army Corps of Engineers dam and reservoir project located on the Raystown Branch of the Juniata River in south-central Pennsylvania (Figure 1-1). The *Raystown Lake Master Plan, 1994*, proposed the development of a number of new or improved facilities for various recreation areas at Raystown Lake. A *Programmatic EA* was prepared and attached to the 1994 Master Plan as Annex A and a Finding of No Significant Impact (FONSI) was signed on 15 February 1995. The *Programmatic EA* addressed development impacts at a level of detail consistent with the conceptual level of the Master Plan and specified that additional project-specific NEPA documents would be prepared when detailed planning of an individual site was initiated.

The Council on Environmental Quality's (CEQ) regulations for implementing NEPA encourage agencies to "tier" related NEPA documents, in order to eliminate repetitive discussions of the same issues. Tiering is appropriate when a NEPA document (such as the *Programmatic EA*) has been prepared for a broad program or policy. Subsequent site-specific documents, prepared for actions included in that program, only need to summarize the issues discussed in the broader document and incorporate those previous discussions by reference. The site-specific document can thus concentrate on the issues that are specific to the subsequent action for which decisions need to be made (Title 40, *Code of Federal Regulations (CFR)*, Part 1502.20.)

This EA is intended as a site-specific supplement to the *Programmatic EA*, under the NEPA tiering provisions in 40 *CFR* 1502.20. The *Programmatic EA* provides detailed information about alternatives considered, other proposed development and improvement projects at Raystown Lake, and the potential cumulative effects of the overall development plan. Such discussions from the *Programmatic EA* have been summarized and incorporated by reference at appropriate points within this EA.

This EA addresses the site-specific components of the proposed development plan for the Upper Corners site, as identified by the *Raystown Lake Master Plan, 1994*, and the *Programmatic EA*. The decision to continue with this action will be based on an evaluation of

the potential impacts of the proposed action on environmental, cultural, social, and economic resources. That decision will reflect the national concern for both protection and utilization of important resources. The decision to continue with this action is also contingent upon attracting private-sector interest in developing the Upper Corners site as described in the following subsections. The benefit that may reasonably be expected to accrue from the development proposal will be balanced against its reasonably foreseeable detriments.

This EA is a public document that presents environmental baseline conditions, specifically at the Upper Corners site and, more generally, at Raystown Lake and the surrounding area. This EA evaluates the potential impacts of the proposed Upper Corners development, to determine if the changes in baseline conditions are significant enough to warrant the preparation of an environmental impact statement (EIS). If an EIS is not warranted, this EA will satisfy requirements for NEPA compliance and a FONSI will be prepared.

This EA has been prepared in accordance with the provisions of NEPA, as implemented by the CEQ's NEPA regulations at 40 *CFR* 1500-1508 and by the COE's Engineering Regulation (ER) 200-2-2, "Procedures for Implementing NEPA."

1.2 Raystown Lake Project Description and History

Raystown Lake is located on the Raystown Branch of the Juniata River, about 5.5 miles upstream from its confluence with the Juniata River. Although most of Raystown Lake is situated in Huntingdon County, a small part of the lake (at its southern end) extends into Bedford County. The lake itself is about 30 river miles long and the entire project area, including the dam, lake, associated fee-owned lands, and areas immediately downstream, comprise approximately 30,000 acres. Development in the Raystown Lake project area includes many outdoor recreation facilities and water-control facilities.

Raystown Lake was constructed as a multipurpose reservoir by the COE in the 1970s and was opened for use in 1976. Recreation was one of the original purposes of the Raystown Lake project, along with flood control, hydroelectric power, fish and wildlife conservation and mitigation, and downstream low-flow augmentation. Recreation was expected to contribute 60 percent of the original project's benefits. Subsequent federal, state, and private investment in Raystown Lake has been substantial. Since the lake opened, management of the lake has consistently sought to improve both passive and active recreational opportunities at Raystown Lake.

Section 318 of the Water Resources Development Act of 1992 directed the COE to update an existing 1976 Raystown Lake Master Plan. The update study reviewed recreation trends identified in *Pennsylvania's Recreation Plan (1991-1997)*, as well as the goals and objectives of the Raystown Lake project. The specific objectives of the study were to upgrade existing recreation facilities, increase the numbers and types of recreation facilities, improve access

throughout the site, and protect environmental and aesthetic resources at the lake and surrounding lands.

A structured decision process was used to evaluate six alternative thematic plans for future development at Raystown Lake. The no-action alternative was evaluated as the seventh alternative. Public opinion concerning the development alternatives was actively sought and incorporated into decision-making, through a comprehensive public involvement program.

The study culminated in a proposed multi-objective plan for upgrading or developing new facilities at 39 recreational sites over a 20-year planning period. The development focus of the proposed multi-objective plan was to attract more visitors to the area, by providing a regional recreation resource that balances environmental, economic, and operational considerations. Figure 1-2 depicts the new and upgraded facilities included in the proposed plan.

The resulting document, the *Raystown Lake Master Plan, 1994*, and the associated *Programmatic EA* provide a guide for the future use and development of natural and constructed resources at Raystown Lake.

One of the sites proposed for new development was the Upper Corners peninsula, also referred to as “Site Number 25” in the plan. The proposed development plan for Upper Corners entailed a conference center, with lodging for up to 500 people and associated recreational facilities (COE, 1994a).

1.3 Purpose and Need of the Proposed Action

The purpose of the proposed development at the Upper Corners site is to promote year-round activity at Raystown Lake and to stimulate economic opportunities in the surrounding area. Private-sector development of public recreation facilities at Upper Corners, in accordance with the development plan proposed in the *Raystown Lake Master Plan, 1994*, and evaluated in the *Programmatic EA*, will help to achieve this purpose.

Section 318 of the Water Resources Development Act of 1992 directed that opportunities for development of parts of Raystown Lake and adjacent lands by private parties be evaluated. The RPI program is designed to increase the role of the private sector in providing public recreation facilities at no additional cost to the federal government. The RPI program will encourage the development of public recreation facilities. It does not address prohibited developments such as private, exclusive-use condominiums or time-share vacation residences. These types of developments are addressed elsewhere in COE policy and regulations.

In 1992, the potential for private-sector development of public recreation facilities on COE project lands was systematically evaluated. A national screening of 400 projects led to a list of 100 sites with the greatest recreation potential. A detailed analysis of the top 25 projects identified by the screening resulted in 9 candidate sites for the RPI program, one of which is the Upper Corners site at the Raystown Lake project. The COE will implement the RPI program

by soliciting interest from the private sector in developing the identified sites.

An RPI marketing report, *Identification of Site Development and Market Potential for Private Development of Public Recreational Facilities*, concludes that the Upper Corners area offers good site and market potential for private-sector development of an 18-hole golf course and high-quality lodging at Raystown Lake. The RPI marketing study for Upper Corners is attached to this EA as Appendix A.

The RPI report determined that the local market for lodging in the Raystown Lake area is under-supplied by approximately 200 rooms. The report further concluded that the existing demand for golf facilities (in rounds of golf) exceeds the existing supply in the Raystown Lake area, by a net supportable demand of 29,030 rounds of golf. According to industry standards, approximately 29,000 to 30,000 rounds is sufficient to justify construction of a new 18-hole golf course. In addition, the report cited a strong economic link between golf, lodging, and conference facilities in private industry and found that hotel/conference centers offer the greatest potential for financial returns to private investors. The RPI report therefore recommended that hotel/conference centers should be the type of lodging market pursued and that lodging projects should be tied to golf course projects whenever possible (see Appendix A).

After completion and public review, this EA will be combined with the RPI marketing report as a final composite document. The final document will be used as part of a package of information to solicit interest from the private sector in developing the Upper Corners site. This EA describes and maps environmental resources, identifies areas of the site that are suitable for construction, maps areas with development constraints, evaluates potential development impacts, and recommends mitigation measures. Thereby, a set of conditions is provided that private parties will have to comply with in order to develop the Upper Corners site under the RPI program.

Development of a conference center, lodging, and recreation facilities at Upper Corners is consistent with the management objectives for Raystown Lake and will satisfy the objectives of the RPI program and Section 318 of the Water Resources Development Act of 1992. The proposed project is intended to complement an existing recreational node at the nearby Seven Points area of Raystown Lake, provide benefits to the local economy in accordance with the objectives of the 1994 Master Plan, and satisfy a regional demand for lodging and recreation facilities.

1.4 Study Authority

The Raystown Lake dam and reservoir project was authorized by the Flood Control Act of 1962 (Public Law 87-874), in accordance with recommendations of the Chief of Engineers as presented in House Document No. 565, 87th Congress, 2nd Session. Recreation was one of the original purposes of the Raystown Lake project. The *Raystown Lake Master Plan, 1994*, and the evaluation of opportunities for private-sector development at Raystown Lake through the RPI program were authorized under Section 318 of the Water Resources Development Act of 1992.

This EA is a site-specific supplemental document to the *Programmatic EA* that was prepared as part of the *Raystown Lake Master Plan, 1994*, and satisfies the tiering process described in the CEQ's NEPA regulations at 40 *CFR* 1502.20. Previous NEPA documentation prepared for Raystown Lake is available from the U.S. Army Corps of Engineers, Baltimore District, CENAB-PL-E, P.O. Box 1715, Baltimore, Maryland 21203-1715.

WDCR978/033.DOC

2.0 DESCRIPTION OF THE PROPOSED ACTION

The proposed action analyzed in this EA is the construction of a conference center complex with associated amenities at the Upper Corners site, as proposed in the *Raystown Lake Master Plan, 1994*. This EA will consider the actions necessary to construct and operate the proposed complex. This section describes the potential facilities associated with the proposed conference center and the general characteristics of the proposed construction site. Section 4.0 contains a more-detailed description of baseline conditions at the site. Figure 2-1 shows the proposed construction site.

2.1 Facilities Proposed for Construction

The proposed facilities for the conference center complex are listed below. Specific measurements and standards are only for conceptual use. Actual development plans may have different measurements or standards. The facilities and their attendant roads and landscaping are expected to require approximately 80 to 140 acres. Both the infrastructure that must be constructed to support the facilities and their associated acreage requirements are described in subsection 2.1.1.

Overnight accommodations for up to 500 people

The conceptual design envisions three types of housing facilities: a conference center complex containing 150 hotel-type rooms; six separate lodges, each with 30 rooms; and nine cabins of 2 units each. The total is 216 rooms or units. The lodges and cabins will cover approximately 1.7 acres and require approximately 1 acre of parking. The acreage requirements of the hotel-type rooms are included in the following description of the conference center complex.

Conference Center Complex

This facility will cover approximately 2 acres and house an auditorium, a series of smaller meeting rooms, a lobby, food service areas, a health spa, and administrative offices. An additional 1.1 acres will be required for parking.

Golf Course

A golf course of either 9 or 18 holes will be constructed, depending on how a developer chooses to co-locate other facilities and conform to possible constraints posed by topography and sensitive resources. An 18-hole golf course requires approximately 150 acres.

Enclosed Swimming Pool

A 25-meter swimming pool and associated changing and equipment storage areas will

be housed in a building of approximately 3,750 square feet. The enclosed facility is intended to provide year-round swimming. It also is intended to provide greater conformity to the natural landscape and minimize effects on scenic views of the Upper Corners area from other parts of Raystown Lake. The swimming pool and the ice skating rink are intended to be integral parts of the conference center complex.

Tennis Courts

A complex of six tennis courts, covering approximately 43,200 square feet, will be located close to the conference center. The courts and associated pedestrian paths will use a low-maintenance surface. The courts themselves will be surrounded with an appropriately sized fence for containing tennis balls. No artificial lighting will be used at the courts.

Multipurpose Play Area

A multipurpose play area covering approximately 110,000 square feet will be constructed by using natural grasses. Facilities such as changing or equipment storage rooms will be constructed as part of facilities associated with the swimming pool or the ice skating rink. There will be no artificial lighting for the multipurpose play area.

Ice Skating Rink

An ice skating rink covering approximately 7,500 square feet will be built near the conference center complex. The rink will be outdoors and is not intended to be operable during the summer.

Outdoor Amphitheater

An outdoor amphitheater serving as a summer venue for performing arts, such as concerts and plays, will be located to make maximum use of topographic variations. Landscaping with trees and shrubs will be used to merge the stage area with the surroundings. Seating areas will be covered by grass. The amphitheater will be designed to hold approximately 500 people and will cover approximately 15,000 square feet.

Boat Dock

A small boat dock, approximately 5,000 square feet, will be constructed in a way that minimizes effects on potentially sensitive shoreline habitat. Seasonal boat-storage slips will not be constructed. The boat dock will be only for transient boaters and will not provide accommodation for overnight mooring or for boat rental to people other than conference center visitors. Existing facilities at the nearby Seven Points Marina will continue to serve most of the recreational boating needs in this area of Raystown Lake.

Acreage Requirements of the Proposed Facilities

The estimated acreage required for the proposed facilities has been developed to assist in determining site suitability and assessing impacts, as shown in the following table. The calculation assumptions are presented in Appendix B.

Acreage Requirements	
Facility	Approximate Required Acreage
Conference center facilities	2.0
Conference center parking	1.1
Lodges and cabins	1.7
Lodge and cabin parking	1.0
Golf course (9 holes)	60.0
Other recreation facilities	4.23
Landscaping and roads	10.5

An 18-hole golf course requires approximately 150 acres. To fit a golf course along with the conference center and other associated facilities within the areas suitable for construction, a developer is likely to be limited to a 9-hole golf course. A total of about 80 acres would be required for all of the above-listed facilities.

2.2 Infrastructure Requirements

The facilities described in subsection 2.1 must be supported by water and wastewater facilities, roads, and electric power. The parking and road acreage requirements are described in the previous section.

The demand for potable water from these facilities is expected to be approximately 90,000 gallons per day (gpd), excluding water for golf course irrigation and for fire protection. The three options for supplying water to Upper Corners are (1) expand the capacity of the Seven Points water treatment plant and pipe the water to Upper Corners; (2) install a package water treatment plant at Upper Corners; and (3) install two package treatment plants, one to supply water to the northern peninsula and one to supply the southern peninsula.

From the perspective of minimizing disturbance to natural areas, constructing package treatment plants at one or both peninsulas is preferable to constructing a pipeline from the water

plant at Seven Points, but a new water intake would be required. Clustering facilities requiring potable water on the northern peninsula will further reduce the acreage required for these facilities.

A package water treatment plant of appropriate size can be housed within a building measuring 40 by 60 feet. A pump station will be required to move the water from the lake to the treatment plant. Options for the pump station that minimize shoreline disturbances will be considered. Access to the lake's edge will be required for pump maintenance.

The estimated sewage flow from the proposed development is 64,000 gpd. The two options for handling Upper Corners wastewater flows are (1) conveying the flows to the existing Seven Points Wastewater Treatment Plant (WWTP) are (2) constructing a new WWTP at Upper Corners. Like water distribution, construction of a new WWTP at Upper Corners will minimize disturbance to natural areas. Clustering facilities that generate wastewater on the northern peninsula will further decrease effects.

A packaged extended aeration plant and service road will require approximately 11,250 square feet. This assumes that sludge will be processed off the site to minimize odor potential in a resort area.

Storm-drain facilities will need to accompany the development facilities. The configuration of these facilities and their required acreage will depend on how the facilities are situated on the landscape and the methods that are required for erosion and sedimentation control. Therefore, specific acreage for these facilities cannot be presented in this section. For a discussion of practices for erosion and sedimentation control, see subsection 5.1.1.

Preliminary load for the Upper Corners development was calculated by using a worst-case assumption that the proposed facility will be operated year-round and that all heating and air conditioning will be electric. The electric power requirements under such conditions will be approximately 4 megawatts.

2.3 Site Planning Objectives

The conference center complex and recreational facilities at Upper Corners should be designed to protect the views of the shoreline and surrounding lands that are important to recreational users of the lake, including those who come for fall foliage tours, while allowing filtered views of the lake from selected vantage points within the new development. Naturally occurring vegetation and additional plantings of native-type vegetation will be used to screen views of the conference center facilities from other users of the lake.

Most construction disturbance should be limited to the interior areas of the peninsula. Natural vegetation and topographic features along the shoreline should not be disturbed by construction, except in very limited areas necessary for access to the lake or to provide framed views of the lake.

The extent of continuous shoreline disturbance should be limited by not constructing a swimming or fishing beach and by constructing only a small boat dock suitable for transient activity or for a small-scale rental fleet.

WDCR978/033.DOC

3.0 ALTERNATIVES CONSIDERED

This section describes the potential alternatives to the proposed action, including other development plans considered and the no-action alternative. These alternatives were among those previously considered and evaluated in the *Programmatic EA*.

3.1 The No-Action Alternative

NEPA documents refer to a continuation of existing conditions without the implementation of, or in the absence of, the proposed action as the no-action alternative. Inclusion of the no-action alternative, as the baseline against which federal actions are evaluated, is prescribed by CEQ regulations. The baseline established to evaluate the environmental and socioeconomic effects of the proposed action are the conditions at Upper Corners in the absence of the proposed action. These conditions are described in Section 4.0, "Affected Environment."

Under the no-action alternative, the proposed development of a conference center at Upper Corners, as recommended by the 1994 *Raystown Lake Master Plan* and the *Programmatic EA*, would not be implemented and the recommended inclusion of this project in the RPI would not be carried out. The site would remain available for future development.

3.2 Alternative A: Conference Center Development

Alternative A is the COE's proposed action. Alternative A consists of the proposed development of the Upper Corners site for a conference center complex, with associated lodging and recreational amenities, by a private party or parties under the RPI. The proposed facilities and the construction site are described in more detail in Section 2.0, "Description of the Proposed Action."

This alternative is part of the proposed multi-objective plan that was developed in the *Raystown Lake Master Plan, 1994*, the impacts of which were initially evaluated in the associated *Programmatic EA*. This EA is tiered on the 1994 *Programmatic EA*.

Alternative A has been further defined for this site-specific EA by determining the areas within the proposed site that are most suitable for construction and by estimating the acreage requirements of the proposed facilities. Extremely environmentally sensitive areas have been identified and the planning and analysis of the proposed action is focused on the more suitable areas of the site. This screening process is described in subsection 5.1, "Impact Assessment Methodology." The results of the screening process are documented throughout Section 5.0 and on the maps included with this EA. The screening and siting process has resulted in a set of conditions that a private-sector developer will have to comply with in order to develop a conference center at the Upper Corners site under the RPI program.

3.3 Master Planning Alternatives Previously Evaluated

Construction of a conference center at an alternative site (Hopewell, at Lake Navigation Marker 25) was considered in the 1994 *Programmatic EA*. Hopewell was ruled out as a site for the conference center because extensive nonfederal infrastructure would have been required and the construction of infrastructure could have resulted in significant adverse environmental impacts. (See Section A.3.2, “Alternative Development Concepts Considered for Specific Sites,” Site 7–Hopewell, in the *Programmatic EA*). Therefore, the Hopewell alternative site is not considered further in this EA.

The 1994 *Programmatic EA* also evaluated the viability and potential impacts of several alternative development plans for the Upper Corners area, as a part of the overall set of alternatives that were examined for Raystown Lake. Because those alternative plans for Upper Corners have already been considered and eliminated in the 1994 *Programmatic EA*, and because this EA is tiered on the 1994 *Programmatic EA*, those alternatives are not considered further in this EA.

Six alternative plans for the future development of Raystown Lake, based on different themes and objectives, were considered at 39 specific sites in the *Raystown Lake Master Plan, 1994*, and the *Programmatic EA*. The six thematic alternatives were minimal change, environmental activities, cultural activities, economic development, hunting and fishing, and family recreation and water sports. The no-action alternative was considered as the seventh alternative.

After public comment was received on the six alternative plans, a decision matrix was designed, with a total of 12 variables that were weighted on the basis of their relative importance to the goals and objectives of the 1994 Master Plan. Each facility in the alternative plans was evaluated using this matrix. The final proposed plan was a multi-objective plan that combined aspects of more than one of the thematic alternatives or the no-action alternative, as appropriate at individual sites.

Details about the alternative plans, the facilities and sites considered, the public involvement program, and the structured decision process can be found in sections A.3 and A.4 of the *Programmatic EA* and in sections 6 and 7 of the *Raystown Lake Master Plan, 1994*.

The following alternative plans were considered for the Upper Corners site during the master planning phase:

Cultural Alternative (Plan 3). Sheep Rock Shelter archeological interpretive center, crafts school classrooms, and festival area. This alternative was rejected because locating an interpretive center and related facilities at an established, high-use area such as nearby Seven Points was considered more suitable.

Economic Development Alternative (Plan 4). Conference center with marina, bed-and-breakfast (B&B) development, floating restaurant, and seaplane base. Some aspects of this alternative were incorporated into the proposed plan for Upper Corners. The marina was

rejected, however, because of the relatively steep topography at the Upper Corners site. In addition, a marina at Upper Corners (Lake Navigation Marker 10) would compete with the nearby Seven Points Marina (Lake Navigation Marker 9) and would increase existing boat traffic congestion in this general area of the lake. The seaplane base could have contributed to more congestion and potential conflict with Seven Points and was also rejected.

Fishing and Hunting Alternative (Plan 5). Shore fishing and picnic area, lodge and cabins, B&B development. Relatively steep topography at the Upper Corners site makes it less appropriate for shore fishing and picnic facilities than other available sites.

Family Recreation and Water Sports Alternative (Plan 6). Large boat marina, boat storage, seaplane base, fueling dock, floating interpretive center, boating and water ski school, jet ski and water ski courses, swimming beach, docking area. This alternative was rejected due to topography, conflict with the nearby Seven Points Marina, and potential boat traffic congestion.

WDCR978/033.DOC

4.0 AFFECTED ENVIRONMENT

This section describes the environmental baseline conditions and resources at the proposed Upper Corners construction site and in surrounding areas, as appropriate. The conditions described in this section provide the baseline against which the effects of the proposed action are evaluated in Section 5.0, “Environmental Consequences.”

4.1 Project Area Description

The Upper Corners site is contained within the COE Raystown Lake project. The Raystown Lake project consists of approximately 30,000 acres, including dam and reservoir areas, and areas immediately downstream of the dam along the Raystown Branch of the Juniata River. The reservoir is approximately 30 river miles long, covering a distance of approximately 20 miles between the dam, near Huntingdon, and the upstream end of the lake near Saxton. Lands surrounding Raystown Lake provide a diversity of habitats, including forests, forested ravines, rangeland, wetlands, and shale barrens.

The lake and surrounding project lands are popular for boating, fishing, hunting, camping, and other outdoor recreation activities. Development within the Raystown Lake project consists of structures associated with operations and maintenance of both the recreation and flood-control facilities. Facilities include boat launch ramps, camping and recreation areas, two sewage treatment plants, a water supply plant, the dam, and a maintenance shop complex.

Upper Corners is located in Penn Township in Huntingdon County, Pennsylvania. The Upper Corners project area is located in the north-central part of the Raystown Lake project, approximately 13 river miles upstream from the dam (Figure 1-2). The site identified for the Upper Corners project is about 1,030 acres. The site has approximately 6 miles of shoreline, including approximately 1 mile of shoreline shale barrens habitat. Habitat at the site is predominantly oak-hickory mature forest and successional rangeland on moderate to steep slopes. Forested areas with slopes over 10 percent cover 84 percent of the site.

4.1.1 Land Use

Existing land use on Upper Corners consists of passive and active recreation in the form of hiking, hunting, and fishing.

Land use directly adjacent to Upper Corners consists of public and private recreational open space. Southeast of Upper Corners, across from James Creek, is a restricted natural area that is used by Juniata College as a field station for biological research and education. Facilities at the field station include dormitories, laboratories, and boat moorings that are only available for use by Juniata College.

Northwest of Upper Corners is the Backbone Ridge Game Management Area. This approximately 3,000-acre preserve is actively managed for game by the Pennsylvania Game Commission (PGC). To the north are private forested lands and commercial campgrounds. East of Upper Corners is the Seven Points Recreation Area. Seven Points is a 3,635-acre recreation area with 90 developed acres. Facilities on the developed area include a 20-acre marina with an 800 boat slip mooring capacity; a recreational day-use area with beach, bathhouse, picnic area, and parking; and four camping areas with a total of 162 sites; and a 20-acre group camping area.

Six pipelines cross the Raystown Lake and its project lands. Three of these are located directly northeast of, but are not on, the Upper Corners project area and are owned by Arco Pipeline Company, Mobile Pipeline Company, and Allegheny Power Systems Inc. The pipelines are part of the Laurel Line system and transport natural gas and petroleum products. All lines crossing the project are buried in at least 3 feet of soil or, where buried in rock, are at least 1 foot deep. At water crossings, all lines are under at least 60 feet of water and are buried under the lake bottom. Some lines are also encased in concrete. Pipeline companies have ongoing maintenance and monitoring systems for these lines and are responsible for cleanup of any spills. There have been no incidents of spills or leaks since reservoir operations began in 1974. Electrical lines are also buried in this right-of-way.

Management of the pipeline consists of mechanically cutting vegetation and using herbicides to maintain a cleared right-of-way. Vegetation in the right-of-way consists of open rangeland with shrubs.

4.1.2 Geology

The Raystown Lake project area is located in the Ridge and Valley physiographic region. This region is underlain by sedimentary rocks, which were deposited in distinct layers over geologic time periods. These successive geologic layers were folded extensively as part of a regional syncline. Over time, the layers composed of softer, more erodible shales and mudstones were weathered away while the harder layers composed of material such as sandstones and conglomerate remained. This phenomena resulted in the regional ridge and valley terrain. The summits of the southeast to the northeast running ridges are characterized by rock outcrops and thin soil. The valleys are characterized by more developed colluvial soil.

The Upper Corners project area is located on the southwest face of the Allegrippis Ridge. A steep ravine divides the northeast and southeast halves of the site. Because of the reservoir created by the dam, the project area actually is located in the center of the ridge formation rather than in the basin. Steep slopes of exposed shale outcroppings are located on the south-central shoreline between the two peninsulas and on the south facing shoreline of the southern peninsula. These steep outcroppings are the geologic basis for the rare shale barrens natural community.

4.1.3 Soils

The predominant soil series on Upper Corners are the Berks-Weikert association and the Calvin, Albrights, Raritan, and Klinesville series (Figure 4-1).

The Berks-Weikert association covers approximately 56 percent of Upper Corners. According to the *Soil Survey of Huntingdon County*, prepared by the Natural Resource Conservation Service (NRCS, formerly the Soil Conservation Service), soils in this unit consist of approximately 50 percent Berks shaley silt loam and 30 percent Weikert shaley silt loam. These units consist of 25 to 70 percent slopes with well-drained soils on highly dissected uplands. The soils were formed in material weathered from shale, siltstone, and sandstone. Most of the areas associated with the Berks-Weikert association are wooded. The association is well suited to wildlife habitat and open space. In disturbed areas, intensive management is needed to control runoff and reduce erosion. The major limitations for most uses are steep slopes and shallow depth to bedrock.

The Calvin series covers approximately 24 percent of Upper Corners. These units consist of moderately deep, gently sloping to moderately steep, well-drained soils on highly dissected uplands. These soils formed in material weathered from shale, siltstone, and fine-grained sandstone. Most of the acreage associated with these soils is wooded or idle. Depth to bedrock is 36 to 40 inches. Moderate to intensive management practices are needed to control runoff and reduce erosion and loss of organic matter and soil nutrients in disturbed or cultivated areas. The major limitations for most uses are steep slopes and in some places shallow depth to bedrock.

The Raritan soil series covers approximately 5 percent of Upper Corners. This soil consists of deep, nearly level to sloping moderately well-drained soils on stream terraces. These soils formed in old soil material deposited by streams. Runoff is medium and in disturbed or cultivated areas, the erosion hazard is slight to moderate. The soil is suited to pasture, hay, trees, and some crops. The potential limitations for most uses are steep slopes, shallow depth to seasonal high water table, and moderately slow permeability.

Upper Corners has three soil series, Albrights, Atkins, and Ernest, which are identified by the NRCS as hydric or having inclusions of hydric soils. Potential wetlands based on these soils cover 5 percent of the site.

Albrights silt loam (3 to 8 percent slopes and 8 to 15 percent slopes) and Ernest silt loam (3 to 8 percent slopes and 8 to 15 percent slopes) are soils that may have inclusions of hydric units. Both of these soils are found on the lower slopes, at the foot of slopes, and in upland drainage swales. Major limitations for development on these soils are slow permeability and a shallow depth to the seasonal high water table.

Atkins silt loam is characterized by nearly level slopes with slow runoff and moderate erosion potential. This soil is listed as hydric by the NRCS and is well suited for pasture, trees, wildlife habitat, and recreational uses. Flooding and a high water table limit development on these soils.

4.1.4 Topography and Drainage

The Raystown Lake project is located in the Ridge and Valley physiographic province of the Appalachian Highlands in south-central Pennsylvania. This region is characterized by narrow ridges and broad valleys that run in a northeast to southwest direction. Upper Corners is located on the southeast slope of the Allegrippis Ridge and lies between elevations of 1,315 feet at the ridge top and 786 feet at the lake shoreline.

The northeast boundary of the site generally follows the Allegrippis Ridge. The southeast boundary of the site follows the shoreline forming two peninsulas. These peninsulas are separated by a steep wooded ravine. Moderate slopes from 2 percent to more than 20 percent are found on the ridge top of the southwest peninsula and at the south end of the northeast peninsula. The central ravine and shoreline are also characterized by steep slopes (Figure 4-2).

The Raystown Lake watershed comprises 29 percent of the Juniata River drainage area and drains an area of 960 square miles. The Upper Corners 1,030-acre parcel is contained entirely within the Raystown Lake watershed. Runoff from Upper Corners drains directly into Raystown Lake. Overland drainage patterns may be concentrated due to the natural topography of small ravines and gullies.

4.1.5 Climate

The climate of the Raystown Lake region is humid continental with some characteristics of a mountain climate. The mountain and valley influence on the air movements causes somewhat greater temperature extremes than are experienced in the southeastern part of Pennsylvania. Consequently, the daily range of temperature is greater under these valley influences. Although fog is not an uncommon climatic condition in the Raystown Lake region, local reports show that it has increased since inundation of project lands.

The mean annual precipitation for the Raystown Lake watershed is about 37 inches with a minimum and maximum annual recorded precipitation of 23.61 and 53.35 inches, respectively. March through August have the highest monthly average precipitation with the least precipitation occurring in the late fall and winter. The annual snowfall averages 33 inches, and the average annual temperature is about 50 degrees Fahrenheit. Prevailing winds are from the northwest and southwest during the spring and fall and from the southwest in the summer.

Springtime floods caused by snowmelt and heavy rain floods associated with tropical storms or hurricanes are experienced in the Juniata watershed. Seven notable storms of record have occurred since 1889. Flood and drought conditions directly related to the Raystown Lake are generally mitigated by the dam. Full-flood capacity will raise the water level to 812 feet elevation from the average 786 feet elevation, although dry spells may cause the water level to be lowered significantly due to mandatory outflows.

4.2 Air Quality

The Upper Corners area is primarily rural and exhibits good air quality; however, the proposed project site is in a non-attainment zone for ozone. Current land use at the site does not affect air quality. There is little or no heavy industry in the immediate vicinity and no other factors that would adversely affect the air quality in the project area.

4.3 Water Quality

4.3.1 Surface Water

Upper Corners is located in the north-central shoreline of Raystown Lake. The water in Raystown Lake is generally of excellent quality. Nutrient loading in the upper end of the reservoir is moderately high as a result of upstream municipalities and agricultural runoff. However, the long retention time of the reservoir results in a significant reduction of the nutrients in the main body of the lake. Algae blooms occasionally occur in the upstream part of the lake and in some of the coves and bays. Upper Corners is located in the central part of the lake and may undergo moderate to average nutrient loading. The moderately sloping submerged shoreline, as well as the coves and bays in Upper Corners, may also be prone to algae blooms under moderate nutrient loading conditions. Raystown Lake is operated to provide temperature control and low flow augmentation to promote the warm-water fishery in the Raystown Branch below the dam.

Intermittent streams are located at the bottom of ravines throughout Upper Corners. The central gully drains approximately 400 acres and has an intermittent surface flow. The southeast side of the site is bordered by James Creek. The 8,300-acre lake is one of the largest in the Commonwealth and in the Susquehanna River Basin. Raystown Lake is a highland reservoir that enjoys a two-story fishery, providing both cold-water and warm-water game species. Overall, the lake is oligotrophic in nature, with embayments and shallower areas being more eutrophic than the rest of the lake.

During normal nonflood periods, the lake is regulated to maintain a constant elevation of 786 feet national geodetic vertical datum (NGVD). The flow of water released from the lake varies seasonally and releases are managed on a daily basis. The required minimum release is 200 cfs, from mid-May to mid-November, and 480 cfs, from mid-November to mid-May. If inflow does not meet these seasonal outflow requirements, the elevation of the lake may drop below 786 feet NGVD, until the inflow rate increases again. At peak flood events, the full flood-control pool elevation is 812 feet NGVD.

The Raystown Lake project does not have a storm-drainage system. Water that does not percolate into the ground or is not disposed of in other ways, such as via sanitary sewers, flows directly into the lake. The water quality of the lake is very good and is not affected negatively by direct stormwater runoff.

4.3.2 Groundwater

The groundwater table near the lake was raised when the lake was filled. This decreased the stability of existing “high and dry” areas; however, it did not have any destructive effects. The location of the lake on the northwest limb of the Broad Top syncline caused increased pressure in groundwater, which tended to cause many artesian wells within the syncline basin to increase their volume of flow. However, the increase of flow tended to be as slow as the rise in pressure because of the impermeable nature of shale bedrock underlying the lake.

4.4 Aquatic Resources and Wetlands

4.4.1 Aquatic Resources

Upper Corners is adjacent to Raystown Lake, which provides 8,300 surface acres of aquatic habitat. The Pennsylvania Fish and Boat Commission (PFBC) provides active management of the lake fisheries, including the stocking of several game fish species. The lake provides both excellent warm-water and cold-water fisheries.

The water quality of the lake was assessed in the 1994 *Programmatic EA* (Section A.2.2.j) and found to range from very good to excellent, with the upstream water quality typically being of slightly lower quality than the downstream water quality. All surface water within the lake is considered to be suitable for water contact recreation and capable of supporting a diverse and healthy aquatic community. The lake develops a strong stratification by June, with a zero- to 20-foot epilimnion and a 23- to 33-foot metalimnion. The lake is clear, cold, and deep with a well-oxygenated hypolimnion during the warm months. Lake waters are generally characterized as soft and slightly alkaline, with oxygen levels capable of sustaining fish life to the bottom of the lake. Pollutants entering the lake are currently minimal.

Eutrophic conditions occur during late summer and early fall, being pronounced in the shallow embayments and along the main stem of the lake approximately 4 miles upstream from Upper Corners. The shoreline along Upper Corners may undergo eutrophic conditions due to the shallow bays on the east sides of the peninsulas. Under eutrophic conditions, these areas are either uninhabitable or marginally habitable for cold-water fish.

Approximately one-half of Upper Corners shoreline has slopes over 10 percent. Aquatic habitat is compromised by the steep shoreline and low proportion of suitable substrate for aquatic vegetation. Nonvegetative cover (for example, logs, stumps, boulders) in relatively shallow water is scarce. The lack of snags and debris for structure in near-shore shallows limits the area available for fish to spawn, forage, and hide from predators. The lack of physical structures along much of the lake shore is one of the main limiting factors to the quality of the lake fishery. Drawdowns caused by required releases during periods of low precipitation have resulted in the death and stranding of shallow habitat organisms and the stressing of near-shore aquatic vegetation and shoreline wetlands.

The lake is actively managed for warm- and cold-water species. Species include tiger muskellunge (*Esox masquinongy*), chain pickerel (*Esox niger*), largemouth bass (*Micropterus salmoides*), black crappie (*Pomoxis nigromaculatus*), bluegill (*Lepomis macrochirus*), striped bass (*Morone lineatus*), yellow perch (*Perca flavescens*), channel catfish (*Ictalurus punctatus*), rockbass (*Ambloplites rupestris*), smallmouth bass (*Micropterus dolomieu*), and brown bullhead (*Ictalurus nebulosus*). Pumpkinseed (*Lepomis gibbosus*), carp (*Cyprinus carpio*), white sucker (*Catostomus commersoni*), and several species of minnows are also present.

4.4.2 Wetlands

On the basis of a desktop wetlands review using National Wetland Inventory (NWI) quadrangles, USGS 7.5 quadrangles, and aerial photographs, and on a subsequent site reconnaissance, Upper Corners has approximately 63 acres of wetlands. Lacustrine limnetic intermittently exposed impounded wetlands are found along the shoreline. These wetlands are affected by the water level fluctuations in the lake. Intermittent upper perennial riverine wetlands may exist on the site in steep ravines and along seasonal drainage gullies. These potential wetland soils are associated with natural drainage areas between small ridges and the soils with hydric inclusions Albrights silt loam (3 to 8 percent) and Ernest silt loam (3 to 8 percent). These wetland soils typically are found on steep slopes and typically are considered to be poor soils for development. Figure 4-3 depicts the areas of potential wetlands found on the Upper Corners site.

Atkins silt loam soils are the only hydric soils as identified by NRCS on Upper Corners. Approximately 4.5 acres of Atkins silt loam are found at the northeast edge of the northern peninsula. These soils are likely to support wetland vegetation due to flooding potential and shallow depth to seasonal high water table.

4.5 Vegetation

Vegetation mapping and description is based on aerial photographic interpretation, previous documentation for the *Raystown Lake Master Plan, 1994*, and the *Programmatic EA*, and site reconnaissance. Figure 4-4 depicts the vegetative cover at the Upper Corners site. Vegetation at Upper Corners is characteristic of the Ridge and Valley region. Predominant cover consists of oak-hickory mixed-deciduous forest and covers approximately 80 percent (940 acres) of the site. Species associated with this forest type include shagbark hickory (*Carya ovata*), pignut hickory (*Carya glabra*), mockernut hickory (*Carya tomentosa*), sugar maple (*Acer saccharum*), red maple (*Acer rubrum*), white oak (*Quercus alba*), and red oak (*Quercus rubra*). Understory is sparse and consists of saplings of canopy species and low bush blueberry (*Vaccinium angustifolium*), redbud (*Cercis canadensis*), and dogwood (*Cornus florida*). Variations in the age and composition of this forest type varied due to sun exposure, slope, and previous logging practices.

Mixed oak-hickory and conifer forest covers approximately 7 percent (90 acres) of the site and is located on the steep south-facing slopes. Species include red oak, white oak, Virginia pine

(*Pinus virginiana*), and eastern red cedar (*Juniperus virginiana*). Conifer forest covers approximately 6 percent (67 acres) of the site and is located on the ridgetops and south-facing slopes. Species include Virginia pine and eastern red cedar.

Successional rangeland covers approximately 3 percent (30 acres) of Upper Corners and includes both early successional and late successional plant communities. Plants associated with this community include staghorn sumac (*Rhus typhina*), black locust (*Robinia pseudoacacia*), black cherry (*Prunus serotina*), foxtail grass (*Setaria faberii*), orchard grass (*Dactylis glomerata*), multiflora rose (*Rosa multiflora*), smilax (*Smilax rotundifolia*), and goldenrod (*Solidago spp.*). Successional rangelands are a remnant of previous clearing for agriculture and are currently succeeding into forested land.

Shale barrens, a unique plant community adapted to extreme soil and climatic conditions, are located on the steep south-facing shoreline slopes of the northern peninsula. Shale barrens compose approximately 3 percent (32 acres) of the site. Found on outcrops of Chemung shale common to south-central Pennsylvania, these cliffs, and the associated endemic flora, occur when southern exposure, low-soil moisture, shallow or nearly nonexistent soil, and steep slope gradient combine to create a “barrens” situation. Species found in this community include Virginia pine, eastern red cedar, and shale-barren evening-primrose (*Oenothera argillicola*).

Emergent wetland species were also identified on inlets along the shore of Upper Corners. Species include big-leafed arrowhead (*Sagittaria latifolia*), soft rush (*Juncus effusus*), and cattail (*Typha latifolia*).

4.6 Wildlife Resources

Because of the predominantly forested habitat at Upper Corners, wildlife consists of white-tailed deer, wild turkey, ruffed grouse, and gray squirrel. Black bears also have been documented in the Raystown Lake area. The site is adjacent on the northwest side to the Backbone Ridge Game Management Area.. Also known as the PGC Mitigation Area, it was established to compensate for habitat losses associated with the original Raystown Lake project. The area is actively managed by the PGC for wildlife by mowing, share-cropping, and planting regimes. Species that are managed and hunted include white-tailed deer, wild turkey, black bear, ring-necked pheasant, bobwhite quail, migratory birds, and gray squirrel. Trapping for raccoon, fox, and other furbearers is also permitted.

4.7 Threatened and Endangered Species

Appendix D presents letters from the U.S. Fish and Wildlife Service and the Western Pennsylvania Conservancy regarding the occurrence of threatened and endangered species within the vicinity of Raystown Lake.

Threatened and endangered species and habitat identified by the Western Pennsylvania

Conservancy on Upper Corners are associated with the Appalachian Shale Barrens plant community. Approximately 32 acres of shale barrens are on the site. The areas are mapped with other sensitive areas in Figure 5-1. Shale-barren evening-primrose, a threatened species in Pennsylvania, has been identified by the Western Pennsylvania Conservancy as occurring within the Upper Corners boundary. Other rare species, both plants and rare invertebrate fauna, are associated with shale barrens and also may be on the site. Kate's mountain clover (*Trifolium virginicum*), a state-endangered species, is being considered for federal listing and has been found at other shale barrens in the Raystown Lake project area.

Shale barrens are steep south- or southwest-facing slopes covered with a layer of loose shale fragments. This orientation causes extreme surface heating for much of the day. Heat and exposure lead to an inhospitable environment for most plants. Several species have adapted to the environment and now are endemic or grow only on these barren surfaces. Some shale barrens habitat was lost because of inundation by Raystown Lake. This community is sensitive to erosion caused by wave or pedestrian traffic and by pesticide spraying.

Other threatened and endangered species have been identified in the Raystown Lake project lands but are outside of Upper Corners (Raystown Lake Master Plan 1994). Because Upper Corners is contiguous to other areas of the lake, there is potential for these species to be found at this site as well. The least bittern, a state-designated threatened species, was confirmed during breeding-bird surveys to be nesting in two Raystown shoreline wetlands. Marsh wrens, a species of concern in Pennsylvania, also were observed nesting in wetlands around the lake. Black terns, a state-designated endangered species, use Raystown Lake wetlands during migration. Bald eagles, a federally listed endangered species, and ospreys, a state-endangered species, feed and rest along the shores of Raystown Lake. In addition, the lake may be an important wintering area for bald eagles. Other species that are designated a state species of concern include the small-footed bat, the great blue heron, the barn owl, the Illinois pondweed, the yellow lampmussel, and the eastern woodrat.

The U.S. Fish and Wildlife Service correspondence indicates that, except for occasional transient species, no federally listed or proposed threatened or endangered species are known to occur within Upper Corners. However, one federally listed plant species, the northeastern bulrush (*Scirpus ancistrochaetus*), has been documented in Huntingdon County. The northeastern bulrush typically is found in wetlands that are characterized by seasonally variable water levels, including ponds, wet depressions, shallow sinkholes, vernal pools, small emergent wetlands, and beaver-influenced wetlands.

4.8 Prime and Unique Farmlands

Approximately 46 acres of soil defined as “prime and unique farmland” are on Upper Corners. Soil types in prime and unique farmland for Huntingdon County are designated by the Huntingdon County NRCS under the federal Farmland Protection Policy Act-Act, Section 1541 (a) of the Act, 7 USC 4202(a) *et seq.* The soil unit defined as prime and unique farmland at Upper Corners is Albrights silt loam, 3 to 8 percent slopes. At Upper Corners, this soil unit is on an intermittent streambed and is covered with oak and hickory forest and successional rangeland. These areas are not farmed and appear to be poor areas for farming because of their configuration and potential hydric characteristics. Upper Corners also contains soil mapped as “Farmland of Statewide Importance.”

4.9 Wild and Scenic Rivers

There are no Wild and Scenic Rivers designated in Huntingdon County. Raystown Lake is not eligible for Wild and Scenic River designation because of its impounded status. No reach of the Juniata River is under congressional investigation or is being considered for federal designation in the National Wild and Scenic River System.

4.10 Cultural Resources

The Upper Corners RPI project is a federal undertaking and falls within the review requirements of Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 *CFR*, Part 800. The regulations require federal agencies to identify, evaluate, and mitigate impacts on National Register eligible or listed historic properties before project implementation. The efforts are conducted in consultation with the appropriate State Historic Preservation Officer (SHPO) and, at times, with the Advisory Council on Historic Preservation.

For the proposed Upper Corners development, an initial Phase IA archeological study was conducted in September 1995. The study identified the potential for prehistoric and historic cultural resources to be located within the Upper Corners project area. ~~Poplar Island Complex.~~ The report on these investigations recommended that additional testing be conducted (see Appendix B).

The Upper Corners RPI project area has no previously recorded cultural sites. Before the start of the study, a predictive model was developed to identify areas at Raystown Lake having the potential to contain prehistoric archaeological sites. ~~(Figure 4-6).~~ The predictive model was based largely on environmental determinants and did not include an assessment of the potential to encounter historic cultural resources. Because of the highly conjectural nature of the model, it was determined that it needed to be field-verified as part of this study.

The predictive model revealed that sensitive areas for prehistoric habitation were located on

level ridge tops composed of highly erodible shale. Field verification of the predictive model revealed that the level terrain of the ridge tops was formed by the erosion of the soft subterranean mass. Little or no A/B soil horizons were evident at any of the ridge tops investigated. A surface survey of the ridge tops failed to find any evidence that these areas had been used for habitation. The combination of distance to water, poor soil suitability, erosion, and lack of loamy soils contributed to the revision of the predictive model to suggest that the ridge tops had a low potential to support human activities.

Two upland terraces are in the project area. These landforms are level to nearly level and are composed primarily of Raritan silt loams of 2 to 10 percent slopes. The field inspection indicated that both of the areas have the potential to contain prehistoric archaeological resources.

Land-use patterns of prehistoric inhabitants of the region were concentrated largely on the alluvium in the Raystown Branch floodplain, which is currently 100 feet below the surface of

Raystown Lake. Upland terraces and ridge tops would have offered the inhabitants of the floodplain a source for floral and faunal resources. The terraces may have some potential to contain prehistoric sites, but the ridge-top areas are heavily eroded and would contain minimal traces of human activities.

Historic-period research documented that the RPI tract was developed during the early 19th century, and this development consisted of several large farms in alluvial soil of sufficient size to permit agricultural pursuits. In addition, a number of small tenant farms was noted on lands of marginal size and poor slope. Several of the farms continued to operate until the mid-1960s and were removed by the COE for the Raystown Lake project. Field investigation revealed surface evidence of seven historic properties, consisting of foundation rubble, historic artifacts, agricultural landscapes, and, in several locations, extant architectural remains. ~~(Figure 4-6).~~

The results of the investigations revealed that three of the seven historic sites had been disturbed and have little information potential. Four sites are recommended for Phase II-level investigation to determine their National Register eligibility, provided that the sites will be affected adversely by the project. The upland terrace areas in the RPI tract should be subject to additional Phase I-level surveying to identify potential historic properties in those locations.

4.11 Hazardous, Toxic, and Radioactive Substances

A preliminary “Hazardous, Toxic, and Radioactive Waste (HTRW) Assessment” was conducted in 1992 for project lands at Raystown Lake and included the Upper Corners project area. The U.S. Environmental Protection Agency’s (EPA) Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) was consulted to determine the presence of current HTRW sites within Bedford and Huntingdon counties. A total of 26 sites were identified in the 2 counties. None of these sites was located on any Raystown Lake project lands, including Upper Corners.

The 1992 preliminary assessment has been reviewed to determine if changes have occurred from the time of the assessment to the present. No activities changing the original assessment are known to have occurred. No known HTRS are within the Upper Corners project area, and the potential for unknown HTRS is low.

No known aboveground or underground tanks are within the Upper Corners site, but numerous aboveground and underground storage tanks are on Raystown Lake lands. These tanks store various substances, from potable water to diesel fuel, propane, and heating oil. All underground storage tanks are registered with the federal and state governments and are checked periodically for leaks. An action plan exists to respond quickly and minimize impacts from spills. Aboveground storage tanks are also covered under the action plan. This action plan is administered and updated by the COE Raystown Lake office. All individual businesses and concessionaires, including COE, are required to prepare and submit a hazardous material containment action plan to COE. Individual businesses are responsible for all coordination and costs associated with the cleanup of spills and leaks of hazardous material.

4.12 Infrastructure

4.12.1 Utilities

There are no water, wastewater, or stormwater facilities on the project site. The closest water and wastewater facilities are at Seven Points. The Seven Points water treatment facility, constructed in 1992, is a filter plant with chlorination and receives its water from Raystown Lake. The plant has a 75,000-gallon-per-day (gpd) design capacity with an average 25,000-gpd demand and a maximum demand up to 50,000 gpd during peak weekends.

The Seven Points wastewater treatment plant (WWTP), constructed in 1975, achieved secondary treatment through contact stabilization. It is located approximately 1/4 mile from the Seven Points Marina. The plant has a 150,000-gpd design capacity, and the current peak flow is approximately 40,000 gpd during peak weekends.

There are no storm drain utilities at the Raystown Lake project. Any stormwater that does not infiltrate into the ground drains directly into Raystown Lake.

Electrical Power. There are no electrical power facilities on the project site. The closest substation is about 7 miles from the project site. The substation is operated by Valley Rural Electric Cooperative.

4.12.2 Solid Waste

Municipal waste from existing Raystown Lake facilities is collected by a private contractor who transports it to the Bedford-Fulton-Huntingdon Solid Waste Authority landfill near Hopewell in Bedford County. The Authority does not accept hazardous, toxic, or radioactive wastes.

4.12.3 Traffic and Transportation

Huntingdon County contains approximately 254 miles of federal and state highways and 215 miles of township road and borough streets. Interstate Highway 76, the Pennsylvania Turnpike, crosses the southern part of the region and provides east-west access to the Raystown Lake area from the major population centers of Philadelphia, Harrisburg, and Pittsburgh. Within Huntingdon County, U.S. Route 22 serves as the major traffic artery, also extending east to Harrisburg and west to Pittsburgh. Route 22 is the most traveled route within the county, with approximately 80 percent of all business and 60 percent of the total county population within its corridor (Huntingdon County Business and Industry [HCBI], 1991).

Extending north to south along the proposed project area is U.S. Route 26, the third most heavily traveled highway in the county. Route 26 is a two-lane, state-owned highway and would serve as the access route for the project from either Huntingdon in the north or the Pennsylvania Turnpike to the south. Most of the tourist traffic bound for Raystown Lake attractions use Route 26. The most recent traffic data available from the Pennsylvania Department of Transportation (PennDOT) indicate that the average daily trips along Route 26 in proximity to the proposed project site were 5,374 vehicles per day (J. Ickes, PennDOT, personnel communication 8/29/95). Counts were taken in the summer, a period of heavier recreational travel in that area. Traffic congestion along Route 26 is reportedly not a concern to PennDOT.

4.13 Socioeconomic Conditions

This section summarizes the social and economic conditions in the Raystown Lake region. The Raystown Lake socioeconomic region is defined as the Pennsylvania Uniform Planning Region 7 and is comprised of the six surrounding counties of Huntingdon, Bedford, Blair, Cambria, Fulton, and Somerset. Additional information about the region is presented in subsection 3.9 “Social and Economic Setting” of the *Raystown Lake Master Plan, 1994*, and in subsection A.2.3 “Social and Economic Setting” of the *Programmatic EA*.

4.13.1 Demographics

As of the 1990 census, the six-county region surrounding Raystown Lake had a combined population of 479,600 people, an overall decline of 4.5 percent from the 1980 census. Although the population of Fulton, Huntingdon, and Bedford counties increased between 1980 and 1990, showing a higher rate of growth than the state's, population in the larger counties of Cambria, Blair, and Somerset declined. According to projections by the U.S. Bureau of Economic Analysis (BEA), all six counties are expected to steadily gain population through 2020, but Bedford and Huntingdon counties are expected to have slight declines in population between 2020 and 2040 (COE, 1994).

In general, the boroughs of the region are losing population while the rural areas are growing. Population density in Huntingdon County is sparse to moderate (zero to 80 people per square mile), except in the boroughs of Huntingdon and Mount Union and in Smithfield Township, located northeast of the lake, where population is fairly dense (80 to 120 or more people per square mile). Huntingdon, the county seat, and Mount Union boroughs are the largest communities in the county. About 60 percent of the population of Huntingdon County lives in the U.S. Route 22 corridor that runs in a generally east-west direction, about 6 miles north of Raystown Lake (HCBI, 1991).

4.13.2 Economics

According to a 1994 study published by the Center for Rural Pennsylvania, which used demographic and economic indicators to group rural counties into four functional categories, most of the counties of the six-county region (except Cambria and Blair) can be described as “Rural Prototypes.” These counties have relatively small populations (fewer than 100,000 people), which are largely rural and have remained fairly stable in size, with high unemployment and percentages of substandard housing that are higher than average. Cambria and Blair counties are classified as “Distressed Counties.” They have suffered economic hardship because of reverses in the coal, steel, and other declining industries, have high unemployment rates, and have had significant population losses (COE, 1994).

Per capita income is defined as the total personal income in an area, divided by the number of people living in that area. According to the 1990 census, per capita incomes in the Raystown Lake region were among the lowest in the Commonwealth of Pennsylvania, ranging from a low of \$8,094 in Huntingdon County to a high of \$8,988 in Cambria County. Median family incomes in the region ranged from a low of \$25,355 in Bedford County to a high of \$28,367 in Cambria County. The median family income in Huntingdon County was \$27,807 in 1989.

The annual average rate of unemployment in the six-county region was 8.4 percent in 1994, nearly one-third higher than the state (6.2 percent) or the nation (6.1 percent). Huntingdon and Cambria counties in particular have high unemployment, at 10.7 and 9.3 percent, respectively. The total civilian labor force in the six-county region was approximately 216,100 people in 1994. Huntingdon and Bedford counties together accounted for about 20 percent of that total (Pennsylvania Department of Labor and Industry, 1995).

The services, retail trade, and manufacturing sectors dominate the economy of the region. The services sector provides about 30 percent of the jobs in the six-county region, followed by retail trade at 23 percent and manufacturing at 21 percent. Although the region is considered rural, agriculture (including forestry and fisheries) accounts for only 0.3 percent of employment (U.S. Bureau of the Census, 1994). Over the upcoming decade, the services sector is expected to grow and the manufacturing sector is expected to decline (COE, 1994).

Most of the businesses in Huntingdon County are based along the Route 22 corridor, north of Raystown Lake. The county’s largest retail districts are located in that corridor, near the boroughs of Huntingdon and Mount Union (HCBI, 1991).

Outdoor recreation is becoming an increasingly important segment of the economy in the region, because of Raystown Lake and other public lands in the area. According to the Visitation Estimate and Reporting System (VERS), about 860,000 visitors came to Raystown Lake in 1992. Spending by nonresident visitors resulted in about \$7 million of economic activity in the region annually. At full development of the facilities recommended (over a 15- to 20-year period) by the *Raystown Lake Master Plan, 1994*, visitation is expected to increase by about 50 percent, to about 1.3 million visitors per year, and is expected to result in an increased economic impact of \$5.2 million in the region (COE, 1994).

The amusement, recreation, food service, and lodging segments of the retail trade and services sectors typically receive most of the spending by visitors. In 1992, 9 percent of all jobs in the region were provided by those industries combined, more than transportation, mining, or any of the major industrial sectors except for services, retail trade, and manufacturing.

A market potential analysis that was performed to assess the suitability of the Upper Corners site for the RPI program found that the local market for lodging in the Raystown area is under-supplied by approximately 200 rooms. This estimate is based on a supportable demand of 18,920 room-nights, and assumes that 365 room-nights equals demand for one room. This feature of the local market represents an exception to regional and national trends, which suggest the lodging market is generally overbuilt. The study also found a strong economic link between lodging, conference, and golf facilities (see Appendix A).

4.13.3 Schools, Libraries, and Recreation Facilities

The public school systems closest to the project area are the Huntingdon school system and the Tussey Mountain school system, with middle and high schools in the boroughs of Huntingdon and Saxton, respectively. Both systems have satellite elementary schools scattered throughout the area. There are no schools located in the immediate vicinity of Upper Corners or near the access road into the site.

Juniata College, a private liberal arts college that is ranked 17th in the nation among similar undergraduate institutions, is in Huntingdon, roughly 8 miles northwest of the project area. The college operates a field station near the confluence of James Creek and Raystown Lake, southwest of Upper Corners. Pennsylvania State University, a public university, is 30 miles north of Huntingdon, in the town of State College.

The public library closest to the site is in Huntingdon. There is a branch library in Saxton.

Most of the recreation facilities in the region are nature-based, offering outdoor activities such as picnicking, boating, camping, hiking, and access to natural areas. Raystown Lake is a principal recreation destination in the region. It is one of the largest water bodies in the state and is one of the few lakes in the region that can offer unlimited-horsepower boating. The COE operates twelve recreation areas at the lake and a day-use recreation area downstream of the dam.

The two most well-developed recreation areas are the Seven Points Recreation Area and Lake Raystown Resort. Seven Points Recreation Area, near Upper Corners, offers a marina, public boat launches, swimming beaches, tent and trailer camping, food service, and picnic areas. Seven Points is managed by COE, except for the marina and food services, which are operated by concessionaires. Seven Points accounts for about 35 percent of the total visitation to the lake's recreation areas. Lake Raystown Resort, located at the southern end of the lake near Shy Beaver Creek, is a concession operation that offers a resort lodge, camping, a waterfront restaurant, a water park, a large marina, and a paddle-wheeler cruise ship.

Undeveloped areas of the lake and the adjacent uplands accommodate active and passive recreation activities such as power and non-power boating, fishing, water skiing, hunting, and hiking. Riverboat cruises are another popular activity, particularly during fall foliage season.

Other public lands in the area include the Backbone Ridge Game Management Area (3,000 acres of Raystown Lake project lands, also known as the PGC Mitigation Area), Trough Creek State Park, Warriors Path State Park, Prince Gallitzin State Park, Rothrock State Forest, Buchanan State Forest, and many state game lands.

According to user survey data in *Pennsylvania's Recreation Plan (1991-1997)* and a regional carrying capacity analysis in the *Raystown Lake Master Plan, 1994*, the types of recreational facilities in the region that most need to be increased or improved include playgrounds, fishing areas, picnic areas, boat launches, swimming beaches, trails, and campgrounds. A regional market analysis of recreation needs in the Master Plan found that demand for hiking and nature walking trails, boat lanes for fishing, and swimming beaches exceeds the supply of such facilities (COE, 1994a).

The RPI market potential study for the Raystown Lake area found that the existing supportable demand for 245,930 rounds of golf exceeds the existing supply of 216,000 rounds, yielding a net supportable demand of 29,030 rounds of golf. According to industry standards, a threshold of approximately 29,000 to 30,000 rounds is required to justify construction of a new 18-hole golf course (see Appendix A).

A net supportable demand for 118 camping sites was determined by the RPI study. The RPI study also found a supportable demand for 94 marina slips in the area, but suggested that the demand could be satisfied by expanding existing marinas (Appendix A).

4.13.4 Public Health and Safety

Law enforcement at Raystown Lake is the responsibility of the Pennsylvania State Police. Park rangers can issue citations, but they do not have arrest or detention authority. Park rangers are not responsible for enforcement activities on lands outgranted to concessionaires (Beall, personal communication, 8/16/95).

Fire and emergency medical services at Raystown Lake are provided by cooperative agreements with four volunteer fire departments (VFD) in the area: Markelsburg VFD and McConnellstown VFD, which are about 7 miles from Upper Corners; Smithfield VFD, about 11 miles from Upper Corners; and Saxton VFD, about 25 miles away. COE compensates these local organizations for their services on COE-managed property with an annual stipend, which the VFDs use to maintain capital fire and rescue equipment. Rescue operations required by accidents on the water, lost hikers, and comparable incidents are the responsibility of Raystown Lake park rangers. COE employs 5 full-time park rangers, supplemented by 12 to 14 additional rangers in the summer.

There are currently two marked and cleared helicopter landing areas for emergency medical

evacuations from Raystown Lake, one at Seven Points and another near the dam. COE is currently working with the Huntingdon County Emergency Management Office and MEDSTAR of Conemaugh Hospital in Johnstown, to provide global positioning unit (GPU) coordinates, as well as details on any known air traffic hazards, for eight or nine helicopter landing zones throughout the park. At the completion of this effort in the fall of 1995, the information will be furnished to other medical evacuation systems in the area, which will then be able to provide GPU satellite location coordinates to helicopter pilots for any future emergency evacuations. The new landing zones, like the existing ones, will not be paved helicopter pads, but simply marked and cleared areas suitable for helicopter landing.

The emergency room closest to Raystown Lake is at the J. C. Blair Hospital in Huntingdon, about 6 miles north of the project area. Patients with more serious trauma or medical conditions are normally transferred to larger hospitals in Johnstown, Hershey, or Pittsburgh.

4.13.5 Noise

Man-made noise generated on the Upper Corners site is limited to gunfire during hunting season and occasional official off-road vehicles. From Upper Corners, recreational boating noise generated from Raystown Lake is audible and notable. Noises from campgrounds, roads, residences, and air traffic are faint to nonexistent on Upper Corners.

4.13.6 Visual and Aesthetic Values

The landscape in the Raystown Lake project area is characterized by steep mountains and valleys, traversed by many ravines and creeks and predominately covered with hardwood forests and associated understory. Interspersed into this natural system are agricultural fields and constructed elements such as large and small towns, parks, cemeteries, commercial developments, roads, one operating railroad and several abandoned railways, and the Raystown Lake dam. The land surrounding the lake is mostly rural, but a number of small businesses associated with the lake have developed in the vicinity.

Raystown Lake itself is a scenic attraction in the area. The lake's high visual quality is owing to expanses of open water, with sinuous curves that follow the narrow, old river bed valley, the surrounding lands with mixed deciduous and evergreen forests, and impressive topographic changes. During the fall, the beauty of the lake is enhanced by colorful foliage on the mountain slopes.

Periodic changes in the aesthetics of the lakeshore are caused by naturally occurring drawdowns during seasonal low-flow conditions, which expose areas of bare shoreline. The visual effect is most negative in shallow coves and water-access recreation areas, where large mudflats are created by the drawdowns. In other reaches, where the banks are more steeply sloped and less of the lake bottom is exposed, or where the lake bottom is rocky, the visual effect is less noticeable. Temporary rises in lake water levels occasionally deposit debris and mud on the shore, usually during the winter and spring.

The Upper Corners project area consists of two undeveloped peninsulas near the midpoint of the lake, bounded to the north by steep slopes, thickly forested with an oak-hickory forest and isolated stands of conifers. The south-facing steep slopes of the eastern peninsula are dominated by the shale barrens, which present a unique view of natural rock features with sparse coniferous vegetation. On the south and west sides of the peninsula, the lake is relatively narrow and deep. The eastern side faces a wide embayment. The site itself is approximately 2 percent open land. The rest of the site's vegetative cover is composed of hardwood forest, interspersed with occasional pine groves. Views of the remote peninsulas of Upper Corners are valued by recreational boaters on Raystown Lake. Small inlets along the shore have a remote and isolated aesthetic quality.

4.14 Environmental Justice

On February 11, 1994, President Clinton issued Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations." The purpose of the order is to avoid the disproportionate imposition of any adverse environmental or economic impacts on minority or low-income populations. The executive order requires that any significant adverse impacts of federal projects or alternatives on minority or low-income populations be addressed. For this reason, demographic information on race, ethnicity, and poverty status in the Raystown Lake region is presented in this section, as the baseline upon which such impacts can be identified and analyzed.

Race refers to the census respondents' "self-identification" of racial background, and includes individuals that are white, black, Asian, and American Indian. According to the 1990 census, the area around Raystown Lake exhibits little racial diversity. White populations made up 98 percent of the population in the six-county Raystown Lake region, followed by black populations at 1.5 percent, Asians at 0.2 percent, and people identifying themselves as American Indians or "other" race at 0.1 percent each. People of Hispanic origin made up 0.3 percent of the region's population. (Hispanic origin refers to ethnicity, not race, and may include people who are Puerto Rican, Cuban, Mexican, and other Spanish-speaking people of any race.)

Huntingdon County is only slightly more diverse than the region as a whole. About 95 percent of the county's 1990 population was white, 4.6 percent black, 0.3 percent Asians or "other race," and 0.2 percent American Indians. Hispanic people (of any race) represent 0.7 percent of the total population of Huntingdon County. The population of Penn Township, which surrounds the central part of the lake containing Upper Corners, is 100 percent white, with 0.3 percent of the population being of Hispanic origin. (Most of the land in Penn Township belongs to the lake; only 865 people lived in Penn Township in 1990.)

An examination of county master plans and land use maps of the project area was conducted for the *Programmatic EA*. That review did not disclose the existence of identifiable minority communities in the immediate vicinity of the project site (COE, 1994).

The U.S. poverty level threshold is an income level that depends on family size and the number of children under 18 years of age. The U.S. poverty level threshold for a family of four in 1989 was \$12,674. The poverty rate describes the percentage of people or families living below the poverty level. The national poverty rate in 1989 was 10 percent. The Raystown Lake region has a higher incidence of poverty than the nation. In the six-county region, 14 percent of all people (for whom poverty status was determined) had incomes below the poverty level. In Huntingdon County, the poverty rate was 13 percent in 1989. In Penn Township, the poverty rate was 8 percent, somewhat less than the national poverty rate.

WDCR978/033.DOC

5.0 ENVIRONMENTAL CONSEQUENCES

An interdisciplinary team of engineers, biologists, planners, archeologists, and economists has analyzed the proposed action described in Section 2.0 against the environmental baseline conditions and resources described in Section 4.0, “Affected Environment.” This section presents the potential impacts identified and the mitigation measures recommended.

The baseline established to evaluate the environmental consequences of the preferred alternative are the conditions at Upper Corners in the absence of the proposed action. The no-action alternative would result in no change to baseline conditions.

The analysis of environmental impacts in this assessment considers the type and degree or significance of the impact. In the analysis of impacts for this EA, the types of impacts of the proposed action are described as direct, indirect, short-term, long-term, or cumulative. More than one type of impact may result from a proposed action. For example, an action may have a direct short-term impact, such as soil or water disturbance during construction, and an indirect long-term impact, such as bringing increased traffic into an area.

5.1 Construction Suitability Review

The Upper Corners project area was reviewed for construction suitability. Sensitive areas for construction suitability were identified in Figure 5-1. These areas may have significant development constraints that are based on the potential presence of cultural resources, threatened and endangered species, or wetlands. Sensitive areas are not necessarily precluded from construction, but further actions, including additional delineation, studies, permits, and mitigation, may be required. These areas were delineated on the basis of limited site reconnaissance and review of available resources, such as National Wetland Inventory Maps, Pennsylvania Natural Diversity Inventory Program, and Natural Resource Conservation Service (NRCS) Soil Surveys. The total acreage of potentially sensitive areas is 182.

Prime and unique farmlands were not identified as sensitive area because permitting regulations associated with this designation do not pose a significant constraint to development. Prime and unique farmland issues are discussed in more detail in Section 5.9.

Steep slopes or thin and erodible soils are not identified as sensitive areas because regulations are not invoked based on these attributes. However, steep slopes and thin erodible soils are indirectly constrained by erosion and sedimentation control regulations that are detailed in Section 5.1.1.

5.1.1 Erosion and Sedimentation Control

According to slope erodibility and seasonal high water table, 84 percent of the soils at the Upper Corners site are characterized by the NRCS as having moderate to severe constraints for roads, buildings with and without basements, picnic areas, landscaping and golf fairways. Steep slopes and erodible soils do not preclude construction. However, these conditions may increase construction costs due to the need for additional sedimentation and erosion control and structural design. Sedimentation and erosion into open waterways may cause turbidity and suspended sediment that may affect water quality as discussed in subsection 5.4. An erosion and sedimentation plan as described below will mitigate or prevent direct and indirect effects of earth-moving activities.

Impacts caused by changes in runoff rates and amounts, floodplain use, encroachment upon waterways and dam construction, are regulated by the Storm Water Management Act, 32 P.S. Subsection 680.1 et. seq., Flood Plain Management Act, 32 P.S. Subsection 697.101 et seq., and the Dam and Safety and Encroachment Act, 32.P.S. Subsection 693.1 et seq., respectively. Water quality impacts are primarily regulated by the Clean Streams Law, 35 P.S. Subsection 691.1 et. seq. Pennsylvania's Erosion and Sediment Pollution Control Program is authorized by and functions under the requirements of the Clean Streams Law.

Pollution is defined in the Clean Streams Law. Sediment pollution is usually caused by the placement, discharge, or other introduction of sediment into waters of Pennsylvania occurring from the failure to design, construct, implement or maintain sediment and erosion control measures and facilities. Any sediment discharge, regardless of the manner of introduction, that is harmful, detrimental or injurious to the designated waters of the Commonwealth is also considered sediment pollution. This legislation applies to both temporary and permanent conditions resulting from earth moving activities. Therefore, any activity at the Upper Corners area that results in erosion and sedimentation pollution must be controlled and mitigated through both interim and permanent measures.

Standard sedimentation and erosion control plans present site-specific runoff calculations and describe sedimentation and control measures and control facilities for mitigating erosion and sedimentation from increased runoff. For projects involving more than 5 acres of earth disturbance or moving, sedimentation and erosion control plans must be submitted to the Huntington County NRCS agent for approval. Implementation and ongoing maintenance of soil and erosion control measures specified in the approved plan are inspected by local NRCS agents.

Because of steep slopes and erodible soils, construction activities and development at the Upper Corners area are likely to require additional temporary and permanent erosion and sedimentation control measures. Erosion and sedimentation control facilities and maintenance will be determined by standard approved calculations for stormwater volume and velocity, as well as site conditions during construction. For example, due to the difficulty of establishing ground cover on the steep, highly erodible slopes, sedimentation and erosion control may require jute matting in addition to mulch for stabilization prior to the establishment of

vegetation. Stormwater runoff calculations may indicate the installation of permanent gravel lined channels and swales rather than the less expensive grass lined swales, and standard temporary soil and erosion control details such as straw bale barriers and filter fabric fence may require more frequent cleaning and replacement.

Table 5-1 provides examples of standard erosion and sedimentation control techniques and best management practices for minimizing measures. The table does not list all erosion and sediment control practices that may be implemented at the Upper Corners site. Rather, it is included for general reference in subsequent sections on impact assessment.

Table 5-1 Standard Best Management Practices and Erosion and Sedimentation Control Techniques	
Erosion and Sedimentation Control Technique	Implications for Sites with Steep Slopes and Erodible Soils
Temporary	
Straw Bales	Increased maintenance, such as replacement and cleaning of sediment, may be required.
Filter Fabric Fencing	Increased maintenance, such as replacement and cleaning of sediment, may be required.
Jute Matting	Additional measure may be necessary to establish vegetation on swales and channels.
Permanent	
Diversion of runoff from developed area	Minimizes overland flow on exposed soils.
Vegetation Buffers	Conservation of existing vegetation will be more efficient than establishing new vegetation.
Minimizing impervious surfaces	Reduces concentrated overland flow on erodible soils.
Standard Rock Filter	Additional maintenance, such as more-frequent replacement and cleaning of sediment, may be required.
Sedimentation Basin	May require permanent gravel lining or jute matting to establish vegetation cover. Additional maintenance, such as more-frequent removal of sedimentation, may be required.
Diversion Channel	May require permanent gravel lining or jute matting to establish vegetation cover.

5.2 Project Area Description

5.2.1 Land Use

Development at Upper Corners will have minor long-term direct impact on land use by reducing habitat for game species and area available for hunting and passive recreation. The impact to hunting and passive recreation opportunities will be minor because the total area necessary for the Upper Corners development is small in comparison to the large area available for hunting surrounding the site. Development on the southern peninsula will have a larger impact on wildlife habitat and available hunting ground because it will fragment habitat that is currently contiguous to the Backbone Ridge Game preserve. Therefore, impacts to existing land use activities can be minimized by clustering development on the northern peninsula

Temporary impacts to hunting and passive recreation from construction noise and traffic can be minimized by limiting construction to non-hunting seasons and by limiting construction to one peninsula or one-half of the site at a time.

Sedimentation and runoff during construction on erodible shoreline soils might also have a short-term impact on fish habitat. This minor impact can be minimized by erosion and sedimentation control measures and best management practices which are listed in Section 5.1.1.

The permanent change from passive recreation and hunting land use to developed land will have a long-term effect on aesthetics and remote qualities currently available to boaters and hikers at Upper Corners. This impact will be minimized by implementing design guidelines that require development to be consistent with Upper Corners existing remote character. These long-term impacts can also be reduced by clustering development on the northern peninsula and leaving the southern peninsula undeveloped. Additional aesthetic impacts can be minimized by siting facilities so that they do not dominate views from Upper Corners or Raystown Lake. This can be accomplished by building low buildings that do not extend far beyond the horizon line and by screening the buildings with existing and proposed native vegetation.

Proposed construction at Upper Corners will have minimal impact on the pipeline right-of-ways, which are located outside of the project boundary. Short-term impacts may be caused by heavy construction vehicles crossing the underground pipeline on the access road. Long term-impacts may be caused by an increase in vehicular traffic crossing the pipeline right-of-way on the access road. These impacts can be minimized by preconstruction notification and by inspection of the pipeline right-of-way and the access road intersection, to ensure that the existing pipeline will not be affected by the additional traffic and weight. If necessary, additional construction measures will be taken by the pipeline companies to ensure that the pipeline is secure in this area.

5.2.2 Geology

Development may have minor, long-term direct impact to geology. Soils throughout the Upper Corners site are thin, therefore, construction of foundations or basements may result in the removal of bedrock. The impact may be reduced by siting buildings in deeper soils if possible, omitting basements from design options, and providing overground utilities.

5.2.3 Soils

Short-term and long-term impacts will be minimal due to the requirement of an erosion and sedimentation control plan. The implementation of an erosion and sedimentation plan will minimize both short-term and long-term concentrated overland runoff and prevent erosion from reaching open waterways.

Short-term minimal impacts to soil may occur during construction due to erosion of exposed soils, runoff, and concentration of sediment at erosion control barriers. Long-term impacts will occur where soils are excavated for grading associated with roads, buildings and parking areas. Indirect long-term impacts to soils from concentrated overland flow will be minimal due to the required implementation of an approved permanent erosion and sedimentation control plan. Due to the erodability of the soils, open landscaped areas, or areas with concentrated runoff such as golf courses and parking lots will require significant erosion and sedimentation control measures to minimize long-range impacts. A partial list of measures I provided in Section 5.1.1.

5.2.4 Topography and Drainage

Development at Upper Corners may have minimal long-term direct impacts on topography because of the need to reduce slopes for roads and buildings. The impact will be minimized by only altering slopes in isolated steep areas which will not affect large drainage patterns. Impacts may also be reduced by siting roads and building on areas with existing moderate grades.

Small scale long-term direct impacts to drainage may occur due to the implementation of an erosion and sedimentation control plan. These impacts will not affect large scale drainage patterns and will serve to minimize concentrated drainage and associated erosion. Erosion and sedimentation control measures which will impact drainage patterns are detailed in section 5.1.1.

5.2.5 Climate

Significant air emissions or surface water that could affect local or regional atmospheric conditions will not be discharged from the site. Therefore, development at Upper Corners will not adversely affect the climate in the Raystown Lake area.

5.3 Air Quality

No significant impacts to air quality are expected to occur. However, initial minor, short-term, localized, direct impacts to air quality would occur as a result of site preparation and facility construction of proposed activities. These impacts would occur in the form of dust and exhaust emissions from construction vehicles, trucks, and other heavy equipment. The increase in traffic as a result of the new development at Upper Corners would have minor long-term direct impact. Potential impacts could be reduced through sensitive site design and traffic control during peak use. Impacts would be localized and of limited magnitude and duration.

The Clean Air Act (CAA) Amendments of 1990 require federal actions to conform with any State Implementation Plan (SIP). A SIP provides for the implementation, maintenance, and enforcement of National Ambient Air Quality Standards (NAAQS) for criteria pollutants. The purpose of the CAA is to eliminate or reduce the severity and number of violations of NAAQS and to achieve the expeditious attainment of such standards. The final rule for “Determining Conformity of General Federal Actions to State or Federal Implementation Plans” was promulgated by EPA on November 30, 1993 (58 *Federal Register (FR)* 63214) and became effective on January 31, 1994. EPA has, for now, limited the applicability of the rule to only those areas classified as “non-attainment,” or classified after 1990 as “maintenance areas.”

The proposed project site is located in a nonattainment area for ozone. Coordination with the Pennsylvania Department of Environmental Protection (DEP) has indicated that the proposed action would be in conformity with the SIP as required by the Clean Air Act of 1990. The Commonwealth of Pennsylvania is working to attain NAAQS set by the CAA. New enforcement sections in the state’s air pollution control laws require DEP to conduct compliance review for all plan approval and permit applications. Detailed plans for specific sites will be developed in compliance with state air quality laws and requirements and submitted for review. If the Upper Corners conference center requires a boiler with a capacity greater than 10 million British thermal units (Btu’s), the developer will be required to comply with the SIP as part of the boiler permitting process.

5.4 Water Quality

5.4.1 Surface Water

Development at Upper Corners will not significantly affect surface water quality. Short-term direct impacts may occur due to sedimentation and erosion caused by construction activities. Impacts will be minimized by siting facilities to minimize impact to surface water, maintaining existing vegetation, and using BMPs in compliance with all federal, state, and local requirements. In compliance with the state Clean Streams Act, erosion and sediment control plans will be reviewed and inspected by the state Conservation Office before earth moving. Before the boat dock is constructed, a Section 404(b)(1) analysis will be conducted, and Section 401 water-quality certification will be obtained.

Long-term impacts on surface water quality may be nutrient loading associated with the maintenance of large landscaped areas, such as golf courses and open public areas. These impacts would be minor and would be reduced by implementation of an erosion and sedimentation plan. The implementation of landscape designs that minimize the need for fertilizers or irrigation will further ensure that surface water quality is preserved.

5.4.2 Groundwater

Minimal direct short-and long-term impacts on groundwater will result from the proposed development at the Upper Corners site. Surface water infiltration may decrease because of increased impervious surfaces, such as roads, roofs, and parking lots. This impact may be direct and long-term; however, it would be minimized by the implementation of an erosion and sedimentation control plan, minimizing impervious surface area, and the use of techniques that permit infiltration, such as porous paving.

5.4.3 Stormwater

Minimal short- and long-term direct impacts on stormwater may be caused by an increase in volume and intensity of stormwater flow, as well as by contamination of stormwater from roads and sedimentation. These impacts will be minimized by the implementation of an erosion and sedimentation control plan, as detailed in subsection 5.1.1. Management techniques for stormwater volume and quality control include stormwater detention ponds, grassed drainage swales, vegetated buffers, preservation of existing vegetation, and installation of permeable paving. Stormwater management systems would be designed as part of all development plans where significant stormwater runoff is calculated.

5.5 Aquatic Resources and Wetlands

5.5.1 Aquatic Resources

Minimal short- and long-term impacts to the shoreline aquatic species habitat will be caused by the construction of a seasonal short-stay dock. Activity from short-term boat docking at the Upper Corners site will drive fish from the immediate shoreline area. This will be a minor impact because there are large areas of undeveloped shoreline adjacent to the proposed facility that can provide habitat for displaced aquatic species. Impacts will be minimized by designing a small facility that provides only short-term docking and boat rentals to conference center visitors and by siting facilities to minimize the impact to existing shoreline aquatic resources. Operations and management practices, such as maintaining canopy vegetation adjacent to the shoreline and allowing snags and downed trees to fall into the lake, will also lessen impacts on aquatic resources.

Sedimentation associated with construction may cause minimal short-term impact on shoreline aquatic species because of increased suspended particulates and turbidity. The effects on biota may include minor temporary and localized reduction in photosynthesis and primary production

and minor temporary and localized impacts on suspension, filter, and sight feeders. These impacts will be minimized by installation and maintenance of an erosion and sedimentation control plan.

5.5.2 Wetlands

Jurisdictional wetland areas will be field-delineated before development. Development at the Upper Corners site may have direct and indirect short- and long-term impacts on wetlands. Direct impacts may be minimized or avoided by constructing only on uplands and by implementing an erosion and sedimentation control plan that protects wetlands from development impacts.

Facilities, such as docks, that require proximity to potential wetlands may have direct short- and long-term impacts on emergent shoreline wetlands. Impacts from construction of shoreline facilities may be minimized by designing small structures that will be placed at the shoreline only during the summer and will accommodate only boat rentals (day only) and other short-term docking needs. Major boating facilities and long-term seasonal slips will not be built at Upper Corners. These facilities already are available at the nearby Seven Points Marina. Facilities that are constructed for short-term docking and boat rental will be designed to minimize impacts on shoreline wetland systems by installing piers on nonwetland areas and waterward of shoreline wetland vegetation.

Minor impacts on wetlands from the implementation of another development at Upper Corners would be regulated by the COE and by DEP. Any activity involving the fill or alteration of wetlands in Pennsylvania is regulated pursuant to Section 404 of the Federal Clean Water Act, 33 U.S.C. Subsection 1344, and the Pennsylvania Dam Safety and Encroachments Act, 32 P.S. Subsections 693.1 *et seq.* The federal and state regulations require permits to be obtained from the ACOE and/or DEP before the filling or alteration of any wetland area. Specific requirements and permit types are specific to each project. In general, the process for receiving a permit from the COE and DEP involves the delineation of wetlands in the vicinity of the project, submittal of an extensive application form and supporting documents, and, in some cases, a mitigation plan detailing actions that will minimize and replace the affected wetlands.

5.6 Vegetation

Proposed development at Upper Corners will have long- and short-term direct impacts on vegetation. Long-term direct impacts to vegetation will result from clearing of mature forest vegetation for permanent facilities. Cleared areas will take the form of both linear corridors and open spaces. Only native plants will be used for landscaping. These impacts will be minimized by clustering developed areas, using existing open successional rangeland before clearing forests, minimizing cleared areas around structures and using native or non-invasive landscaping plants.

Long-term impacts to existing forested areas could be caused by increased recreation activity.

The impacts will be minimized by constructing trails which focus pedestrian activity and by prohibiting off-trail hiking, mountain bikes, all-terrain vehicles, and motorcycles.

Short-term direct impacts to vegetation may result from erosion or runoff during construction. These impacts will be minimized by compliance with federal, state, and local sedimentation and erosion control regulations. Examples of these practices are listed in Section 5.1.1.

5.7 Wildlife Resources

Proposed development at Upper Corners will have short-term and long-term direct impacts on wildlife resources. Loss of wildlife habitat will be minimal due to the relatively small developed area in comparison to the large amount of habitat available in the immediate area around Raystown Lake.

Short-term direct impacts to wildlife resources will occur during construction because of increased noise and traffic levels. Long-term direct impacts will result from habitat fragmentation and increased noise and human activity. Implementation of the Upper Corners conference center will disrupt continuous habitat activity by clearing large open spaces for facilities and linear open spaces for roads and infrastructure. As a result of clearing, edge habitat will increase and may favor deer and small mammals over interior forest-dwelling wildlife species. If existing rangeland is used for facilities associated will lose habitat. Existing remote shoreline habitat and wildlife access to water will also be impacted by development.

Siting practices, such as clustering associated facilities and cleared areas around structures and minimizing roads, will minimize long-term direct impacts to habitat. Concentrating development on the northern peninsula will minimize impacts to habitat because the southern peninsula will be undeveloped and will remain as contiguous habitat to the Backbone Ridge Game Management Area. Concentrating development on the northern peninsula will minimize impacts to habitat from transportation and utility corridors. Large undeveloped areas within the Upper Corners project area and the adjacent Backbone Ridge area will provide habitat for displaced wildlife.

5.8 Threatened and Endangered Species

The shale-barren evening primrose, a threatened species in Pennsylvania, occurs within Upper Corners. Other species of concern, including plant and invertebrate species, are associated with shale barrens and may occur at Upper Corners. In addition, the northeastern bulrush, a federally listed endangered species, is known to occur in Huntingdon County. Other species of concern, including the least bittern, marsh wrens, black terns, and bald eagles, have been identified at Raystown Lake.

Shale barrens are unsuitable for construction because of their protected status as sensitive habitat and the steep slopes and rocky soil associated with this type of habitat. Impacts can be

minimized by designating no wake areas in the lake and siting boating facilities and hiking trails away from the areas adjacent to the barrens. If necessary, fences and signs may be erected to prevent pedestrian access to sensitive areas. Impacts could also be minimized by maintaining a vegetative buffer between developed areas and the shale barrens, prohibiting the use of pesticides and herbicides near the barrens, restricting shoreline development, and designating wildlife areas with limited low-impact access.

On the basis of coordination with the USFWS, wetlands are potential habitat for the northeastern bulrush. If proposed development will affect wetland areas, a survey of the northeastern bulrush will be conducted before project initiation.

5.9 Prime and Unique Farmlands

Impacts on prime and unique farmland are considered insignificant because of the poor agricultural value of prime and unique farmland soil types at Upper Corners.

Development on prime and unique farmland receiving federal support is required to be reviewed and evaluated by using form AD1006. Form AD1006 evaluates prime and unique farmland on the basis of a land-evaluation criterion and site-assessment criteria. The land-evaluation criterion is a relative value for agricultural production of the farmland to be converted by the project in comparison to other farmland in the local government jurisdiction. The site-assessment criteria are site-specific assessments and include items such as amount of land to be converted, contiguous land uses, and existing total acreage being farmed.

The results of the evaluation are considered in relation to other public policy measures and legislation. Development on prime and unique farmland is not precluded regardless of the score if other public policy issues indicate that the development is within public policy objectives. Therefore, because the review is considered in relation to other public policy considerations and needs and because the areas identified as prime and unique farmland at Upper Corners appear to have very low agricultural value, the review of prime and unique farmland does not appear to constrain development at Upper Corners.

5.10 Wild and Scenic Rivers

Because there are no nearby designated or nominated Wild and Scenic Rivers, development at Upper Corners will not affect Wild and Scenic River corridors or watersheds.

5.11 Cultural Resources

A letter dated August 29, 1995, was received from the Pennsylvania SHPO (Appendix E). The letter stated that there is a high probability that significant archaeological sites are in the project area and recommended a Phase I survey of the potentially affected area. A response letter dated December 1, 1995, was sent to the Pennsylvania SHPO as part of the Section 106 coordination process. A Phase IA cultural resource survey was conducted in September 1995 (Appendix B). The survey identified several historic sites in the project area and found that ridge-top locations have a low probability of containing the prehistoric resources. In a letter dated January 26, 1996, that reviewed the Phase IA report, the Pennsylvania SHPO suggested that additional testing of some parts of the project area should be conducted.

Six of the seven identified historic sites will be directly affected by the proposed project. Four of the sites are immediately adjacent to former township road T-404. It is likely that this road will have to be widened substantially before construction to accommodate the passage of construction vehicles into the RPI tract. In the Upper Corners area, the German Baptist Church, the German Baptist Cemetery, and the Upper Corners School are proposed sites that will be directly affected by the footprint of the proposed conference center or immediately adjacent parking areas. It is unlikely that any of these properties can be avoided because of the constricted nature of the terrain on this property.

If possible, all cultural sites will be avoided. If avoidance is not feasible, a Phase II investigation will be conducted. Upon completion of the Phase II investigation, a determination of National Register eligibility will be made. If project development will have an adverse effect on a National Register eligible property, mitigation efforts will be completed and coordinated with the Pennsylvania SHPO before construction affects the resource.

5.12 Hazardous, Toxic, and Radioactive Substances

Currently, there are no hazardous, toxic, and radioactive substances (HTRS) identified at Upper Corners. Therefore, development at the Upper Corners site would have no impact to existing HTRS on project lands.

Storage and transport of HTRS associated with recreational boating and residential development on Upper Corners, specifically of underground storage tanks, aboveground storage tanks, fueling docks, and pipelines would be minimized by using existing facilities located offsite. Appropriate precautions will be taken during construction and operation to minimize exposure or release of any hazardous substances during transport or storage. No significant long- or short-term impacts from HTRS are expected at Upper Corners.

Potential impacts from release of hazardous materials will be minimized by preparing and submitting to COE an action plan for all hazardous material associated with construction or ongoing operations at Upper Corners. An action plan is currently required of all businesses and concessionaires, including COE, that store or use hazardous materials on site.

5.13 Infrastructure

5.13.1 Utilities

Water Treatment and Supply. Although the water treatment plant at Seven Points has some excess capacity (comparing the 75,000-gpd capacity to current peak demand of 50,000 gpd), it is not enough to meet the water demand for Upper Corners, which is expected to be approximately 90,000 gpd. This estimate assumes 500 guests and 100 employees and includes lodging, conference center, and buildings associated with other facilities. Golf course irrigation and fire protection flow would be additional.

There are three options for water supply to provide water to the two peninsulas proposed for development at Upper Corners:

- . Expand the capacity of the Seven Points water treatment plant and pipe the water to both areas.
- . Install a package water treatment plant at Upper Corners to provide water to both areas.
- . Install two package water treatment plants at Upper Corners: one to supply the development area of the northern peninsula and one to supply the southern peninsula.

The most direct pipeline route from the Seven Points treatment plant to the northern peninsula is 9,000 feet long. This route would require crossing seven tributaries of the lake. The bank elevations adjacent to these tributaries are as steep as 2:1 (horizontal:vertical) and the distances between top of bank and streambed are as large as 150 feet. Environmental impacts associated with pipeline construction would be wetland and habitat disturbance and rock excavation and disposal.

The additional trunk pipeline length required to convey water from a juncture on the pipeline described above to the southern peninsula would be more than 10,000 feet long. It would require crossing two additional tributaries, one of which is a ravine 200 feet deep and 1,200 feet wide. Booster pump stations would be required to convey the water over the hills and to maintain adequate pressure at the Upper Corners development.

Installing a package water treatment plant at Upper Corners would require fewer pump stations and fewer tributary crossings. However, a new water intake from the lake would be required. Installing two treatment plants, one on each peninsula, would eliminate the need to cross ravines and tributaries with pipelines. However, it would potentially be more expensive and would still require extensive booster pumps to convey the water to the southern peninsula elevation of 1,300 feet.

From the perspective of minimizing environmental impacts, the construction of package treatment plants at one or both peninsulas would be preferable to constructing a pipeline from the water treatment plant at Seven Points. Clustering facilities requiring potable water on the northern peninsula would further reduce impacts. For any of the utility alternatives selected, pipeline alignment and construction methods should be designed to minimize environmental impacts.

Wastewater Treatment. The Seven Points WWTP has enough excess capacity to handle the sewage generated by the Upper Corners development. The current peak demand on the 150,000-gpd plant is approximately 40,000 gpd, and the estimated sewage flow from the Upper Corners development would be 64,000 gpd. This estimate assumes 500 guests and 100 employees and includes lodging, conference center, and buildings associated with other

facilities.

The two options for handling Upper Corner wastewater flows are:

- . Convey the flows to the existing Seven Points WWTP
- . Construct a new WWTP at Upper Corners

Conveying wastewater flows to the Seven Points WWTP would involve similar problems as the water distribution trunklines described above. Construction of the pipeline and the required booster pump stations would require crossing tributaries and placing the pipes in rock and would result in substantial environmental disturbance. Construction of a new WWTP at Upper Corners would decrease these impacts.

Like water distribution, construction of a new WWTP at Upper Corners would be the preferred environmental alternative. Clustering facilities that generate wastewater on the northern peninsula would further decrease impacts. For any of the alternatives selected, pipeline alignment and construction methods should be designed to minimize environmental impacts.

Water quality is the major impact associated with WWTP effluent. The upper end of the reservoir contains a high nutrient loading due to upstream municipalities and agricultural runoff. However, the long retention time of the reservoir significantly reduces nutrients, and the downstream end of the lake is consistently nutrient-starved (COE, 1994). It is expected that the secondarily treated effluent from Upper Corners would be sufficiently diluted by reservoir volumes to reduce water quality impacts to an insignificant level. In addition, a NPDES permit would be required to address water quality impacts for a new treatment plant. The current permit for the Seven Points WWTP might need to be updated if the Upper Corners sewage is treated there.

The demand for both water and wastewater treatment should be reduced by including water conservation measures during the design of the facilities. Conservation strategies are suggested in a letter, dated September 5, 1995, that was received from the EPA (see Appendix D).

Storm Drainage. Any storm drain facilities constructed to drain the facilities will discharge to the lake. As stated above, the water quality in the lake is very good and would not be adversely affected by direct stormwater runoff.

Electrical Power. Preliminary load calculations for the Upper Corners development were developed by using a worst-case assumption that the proposed facility will be operated year-round and that all heating and air conditioning will be electric. The electric power requirements under such conditions will be approximately 4 megawatts.

The existing substation will need to be upgraded to provide the required electrical power. Overhead power lines will be extended to the site and could be carried on wooden poles. These poles will be located along access roadways to minimize disturbance to erodible soil or vegetation. A transformer and switch gear, requiring a concrete pad of approximately 20 by

30 feet, will need to be installed at the site. Because of the lead time of up to 1 year that is required for these actions, Valley Rural Electric Cooperative should be notified well in advance of the initiation of construction at the site (personal communication, Bob Wareham, Valley Rural Electric Cooperative utility engineer, 2/26/96).

· **5.13.2 Solid Waste**

The proposed level of development at Upper Corners is anticipated to produce approximately 1 ton of municipal solid waste per day, when the facilities are fully occupied. There is sufficient capacity at the Bedford-Fulton-Huntingdon Solid Waste Authority landfill near Hopewell to accept municipal wastes generated at Upper Corners. No hazardous or toxic waste is anticipated to be produced by the Upper Corners development. If hazardous waste is generated, local haulers can convey it safely to appropriate facilities.

· **5.13.3 Traffic and Transportation**

Major elements of the proposed project include 216 rooms of lodging within an overall conference facility and a golf course. Amenities connected with the proposed project (for example, tennis courts, health club, meeting hall), generally are included as uses associated with a conference and resort facility. Although the golf course would be used by those staying at the conference center, both the size of the golf course and the relatively few rooms at the facility would indicate that some number of rounds would be played by people making day trips to the facility. Because of lodging on the site, it is assumed for the purposes of this EA that only 25 percent of the trips normally associated with a golf course, as determined by the Institute of Transportation Engineers *Trip Generation, 5th Edition* (1991), would actually occur. Table 5-2 reflects the anticipated trip generation for the proposed project for a typical summer Saturday.

Table 5-2 Anticipated Trip Generation			
Time	Lodging	Golf Course	Total Trips
Peak Hour - Enter	83	15	98
Peak Hour - Exit	94	6	100
Peak Hour - Total	177	21	198

The total projected peak-hour Saturday traffic for the project is approximately 200 vehicles. Given the level of traffic on Route 22, the additional peak-hour traffic produced by the proposed project would not be expected to produce a significant impact on the regional road system. Traffic generated by the project is also not expected to have an adverse impact on local access roads in the surrounding area. Access to the proposed site will be an important element of the project; however, the COE will coordinate with PennDOT to ensure adequate

and safe accessibility to the site.

5.14 Socioeconomic Conditions

This section discusses the effects of the proposed action on social and economic resources in the Raystown Lake region.

Additional information about the effects of other proposed development at Raystown Lake region is provided in the 1994 *Programmatic EA* (Section A.5.3 "Socioeconomic Resources") and in the *Raystown Lake Master Plan, 1994* (Section 7.4 "Regional Economic Impacts" and Appendix A "Recreation Resource Analysis").

5.14.1 Demographics

The proposed action will not result in any direct or indirect increase or decrease in the residential population or labor force of the region. Given the high unemployment in the region, it is expected that few, if any, employees will relocate from outside the area in order to work at the new conference center. A few people with special skills in operating conference centers and meeting facilities might need to be hired from outside the immediate area.

5.14.2 Economics

The total economic impacts of an action include all of the primary and secondary effects in the local economy. Impacts include a change in the demand for goods and services. Primary effects are caused by the initial changes in expenditures, employment, salaries, and population directly related to implementing a proposed action and include both the change in demand for goods and services and the change in the number of salary earners. Secondary effects are those that are induced by primary effects, through a process of spending and responding and through the economic relationships between what is needed to produce goods and services and the commodities that are produced.

The economic impacts of the proposed action will occur in two phases: construction and operation. The short-term (primary and secondary) impacts of the construction phase will cease when construction is complete, but the long-term (primary and secondary) impacts of the operations phase at the new facility, including increased visitation to the lake, will be ongoing.

Short-term impacts of construction. The total construction cost for the Upper Corners conference center and associated facilities is estimated to be \$15.8 million (excluding design, supervision, and contingency). On the basis of relationships found in U.S. Bureau of Economic Analysis (BEA) data, about 39 percent of the total construction expenditure, or \$6.2 million, will be expended for labor and 61 percent, or \$9.6 million, will be expended for materials and supplies.

In 1992, annual construction industry wages in the six-county region averaged \$22,191 (U.S.

Census Bureau, 1994). The approximately \$6.2 million that will be expended for labor is thus estimated to result in about 278 person-years of construction employment, or 139 full-time equivalent (FTE) construction-related jobs annually, assuming construction takes 2 years to complete. The duration of construction might be longer, and the annual FTE employment less, depending on construction phasing. A sufficient construction labor force exists in the surrounding area to supply this demand without requiring construction workers to relocate from outside the region.

Secondary economic impacts of construction will produce some temporary, additional levels of employment and sales in sectors of the economy that are suppliers to the construction industry and sectors that benefit from the presence of additional workers (for example, restaurants and gasoline stations). Direct and indirect economic effects of both the estimated \$9.6 million expended for materials and supplies and the short-term increase in construction employment are expected to result in a short-term minor increase in income in the county but are not expected to represent a significant change.

Long-term impacts of operation and increased visitation. The RPI market potential analysis identified a supportable demand for lodging and golf facilities in the local market and cites a “strong economic link” between golf, lodging, and conference facilities in private industry. The proposed action will satisfy this demand. The study further recommends that hotel/conference centers should be the type of lodging market pursued for public overnight quarters under the RPI program, because the potential returns for private investors would be greater than if cabins or group shelters were the primary focus of the development program (Appendix A).

New jobs will be created by operation of the conference center, lodging, and associated recreation facilities. Using a standard planning factor for hotels of 0.7 employees per 1,000 square feet (Burchell et al., 1994) and assuming a 155,000-square-foot facility, including the conference center complex, lodges, and cabins (see Appendix C), about 109 full-time equivalent (FTE) jobs are expected to be created at the conference center and lodging complex. Most of the jobs created would be year-round, but the outdoor recreation facilities will create some additional seasonal jobs. Most of the new employees are expected to come from the local labor force. This increase in local employment, and the “ripple effect” of economic activity supplying the services and supplies required by the conference center, will result in primary and secondary economic benefits to the region.

The new conference center also will affect the local economy by increasing the number of visitors attracted to the area. A regional economic impact analysis was performed for the *Raystown Lake Master Plan, 1994*, using the IMPLAN software package that was developed by the U.S. Forest Service, with a recreation module developed by the University of Minnesota and the COE Waterways Experiment Station. Spending and visitation data collected for Raystown Lake during 1991 were used. The impact analysis defined the counties of Huntingdon and Bedford as the study area. Additional information about the regional economic impact analysis is available in Section 7.4 “Regional Economic Impacts” and Appendix A “Recreation Analyses” of the *Raystown Lake Master Plan, 1994*.

The economic impact of attracting more nonresident visitors and the associated increase in spending was estimated. Because the two-county study area is fairly small, it does not have the market diversification necessary to keep most of the money spent in the area; that is, many products are purchased outside the area. About 66 percent of the money spent in the study area by nonresident visitors to Raystown Lake is estimated to remain in the area (COE, 1994).

According to the IMPLAN results reported in the *Raystown Lake Master Plan, 1994*, the increased nonresident visitation that would be generated by recreational improvements at Raystown Lake will result in a total increase in economic activity of approximately \$5.2 million (in 1993 dollars). Approximately 142 FTE jobs will be created in the region, in addition to the onsite jobs created at Upper Corners, to supply the goods and services represented. On the basis of existing visitor spending patterns, the amusement, food, and lodging sectors of the regional economy are expected to receive an estimated 60 percent of the increased economic impact (COE, 1994). Because the Upper Corners project is an entirely new development and will primarily attract nonresident visitors, it is likely to account for a substantial part of that overall increase in economic activity.

5.14.3 Schools, Libraries, and Recreation Facilities

The proposed action will not increase or decrease the regional population; therefore, no direct or indirect impact on schools or libraries is expected. Because there are no schools near the access road to Upper Corners, traffic generated by the conference center will not affect local schools.

The proposed action will increase the number and type of recreation facilities in the area, by adding a golf course, tennis courts, swimming pool, ice-skating rink, and ball fields to the existing facilities at Raystown Lake. The proposed golf course will satisfy the regional demand for rounds of golf determined by the RPI marketing study (Appendix A). Although these facilities will be used primarily by conference attendees and other guests at the new development, many of whom are likely to come from outside the region, they could also be made available to other park users, local residents, and groups at certain times, under circumstances defined by the concessionaire.

The new conference center and lodging could indirectly increase the demand for boat or jet-ski rentals, swimming beaches, and other seasonal, water-based recreational services and facilities at Raystown Lake, by bringing in a relatively large number of people for overnight stays at the same time. The proposed action is not expected to affect the demand for campsites or picnic areas.

5.14.4 Public Health and Safety

The proposed action does not involve any conditions or activities that pose a direct threat to public health and safety. The new conference center and lodging will increase the number of visitors to the lake by up to 500 people at any one time, year-round, which will increase the demand for emergency medical services (EMS), fire fighting, rescue, and law enforcement. This increase represents a direct adverse impact on local service providers and could result in

indirect fiscal impacts, but these impacts are expected to be relatively minor (Table 5-4).

The potential impact on public health and safety resources can be illustrated by using standard planning factors for residential population increases (Burchell et al., 1994) and by treating the expected number of overnight visitors (up to 500 at any time) at the conference center as if they were new area residents. The approximate increase in demand for services that could be expected is shown in Table 5-3.

Table 5-3		
Development Impact on Public Safety Resources		
Resource	Planning Factor	Expected Increase
Police officers (FTE)	2.0 per 1,000 population	1.0
Fire fighters (FTE)	1.65 per 1,000 population	0.8
Fire department vehicles	0.20 per 1,000 population	0.1
EMS personnel (FTE)	4.1 per 30,000 population	0.1
EMS vehicles	1.0 per 30,000 population	0.02
Annual EMS calls	36.5 per 1,000 population	18.3

Although no standard planning factors were available for the type of outdoor rescue services provided by Raystown Lake park rangers, some increase in demand is expected as visitation increases. Park rangers are not responsible for patrolling concession sites, however, and will mostly be affected by incidents that occur elsewhere at the lake.

The increased demand detailed above represents a worst-case estimate, because it is unlikely that the conference center and lodging will be occupied at full capacity at all times. Also, these planning factors are recommended standards for population-based levels of service and are not necessarily the level of service actually provided in the study area.

The increased demand for EMS and fire-fighting services could be mitigated by an annual stipend provided to local volunteer fire departments by the conference center's operating concessionaire, similar to that currently provided by the COE for services on federally operated facilities.

Demand for law enforcement could be reduced if the concessionaire employs a private

security service to handle routine matters such as parking violations, public nuisances, theft prevention, and the physical security of guests, facilities, and grounds.

5.14.5 Noise

Increased traffic, recreational boating, and outdoor sports activities will increase noise emissions at Upper Corners. Vehicular traffic necessary for access to the site by guests and operations and maintenance workers will have a direct long-term impact on noise levels at the site. This impact will be minimized because guests will tend to stay longer and will not need vehicles once on the site. Delivery trucks will be restricted to business hours. Noise will also be mitigated by the conservation of vegetation for sound buffers. A limited number of recreational boats will be available from Upper Corners and access will be limited to docks for private launching. Noise impacts will also be minimized by clustering development on one-half of the site, thereby reducing impacts to wildlife.

Short-term direct noise impacts will occur during construction at Upper Corners. The impacts will be significant because of the need for large construction equipment such as trucks, cranes, and bulldozers. Short-term impacts from construction noise will be minimized by scheduling construction during non-migratory and non-nesting periods for wildlife and by scheduling large deliveries and loud operations during business hours.

5.14.6 Visual and Aesthetic Values

Development will have a long term direct effect on the aesthetics and remote qualities of the Upper Corners site. The construction of the conference center, lodging, and associated recreational facilities will require grading and clearing vegetation, which will result in an adverse impact on the visual quality of the currently undeveloped Upper Corners site. Onsite visual impacts will be mitigated by preserving the existing vegetation (especially mature trees) to the greatest extent possible, designing buildings to be unobtrusive, and landscaping buildings with native vegetation that is consistent with the natural character of the site. Filtered views of the lake from select vantage points within the development will provide positive aesthetic features on the site itself.

Design guidelines that require development to be consistent with Upper Corners existing remote and natural character will be included in the RPI private-sector solicitation package, in order to protect the natural visual and aesthetic qualities of the site. The COE will ensure that final design of the conference center and recreational facilities at Upper Corners protects the views of the shoreline and surrounding lands that are important to existing recreational users of the lake.

Most of the construction disturbance will be limited to the interior areas of the northern peninsula. Natural vegetation and topographic features along the shoreline will not be disturbed by construction, except for in very limited areas necessary for access to the lake or to provide framed views of the lake. Naturally occurring vegetation and additional plantings of native-type vegetation will be used to screen views of the conference center facilities from view by other

users of the lake. With these mitigative actions, no adverse impacts on the visual and aesthetics values of the lake's viewshed are expected.

5.15 Environmental Justice

In accordance with Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations," an analysis of environmental impacts on minority and low-income communities, including human health, social, and economic effects, has been conducted for the preferred alternative. Development of Upper Corners will not create any disproportionately high or adverse human health or environmental impacts on minority or low-income populations of the surrounding community.

Raystown Lake is located in a region where the per capita income is considerably lower than the statewide per capita income and the poverty rate is nearly one-third higher than the national poverty rate. The area immediately surrounding the project site, Penn Township, exhibits a lower poverty rate and a slightly higher per capita income than elsewhere in the region. The jobs created by the proposed conference center, while not a large number, and the direct and indirect economic impacts of the money spent locally by visitors from outside the area, are expected to economically benefit the population of the region. The no-action alternative would prevent this benefit from being realized.

County master plans and land use maps of the project area were reviewed for the 1994 *Programmatic EA*. Neither that review nor a review of 1990 census data has disclosed the existence of identifiable minority communities in the immediate vicinity of the project site. The proposed action will not adversely affect minority or low-income communities.

5.16 Cumulative Impacts

CEQ regulations state that cumulative impacts result from the incremental impact of an action when added to other past, present, or reasonably foreseeable future actions regardless of what agency undertakes such other actions. Cumulative impacts can result from individually minor, but collectively significant actions taking place over a period of time.

Long-term cumulative economic impacts will be positive and result in economic growth to this part of Pennsylvania. Full implementation of the Raystown Lake Master Plan has been previously estimated to result in \$5.2 million in increased economic activity and the creation of about 142 jobs in the region, in order to supply the goods and services represented. Because the Upper Corners project is an entirely new development and will primarily attract nonresident visitors, it is likely to account for a substantial part of the estimated cumulative increase in economic activity.

Site-specific impacts to the land use, soils, topography, vegetation, wildlife, and cultural resources will not be significant if development is appropriately mitigated. However, when

combined with the impacts of other proposed actions at Raystown Lake, there is the potential for a cumulative impact to those resources. All proposed actions, for Upper Corners and the others described in the *Raystown Lake Master Plan, 1994*, must be appropriately sited and mitigated individually to avoid the potential for cumulative impacts.

Section A.5.9 of the *Programmatic EA* that was prepared for the *Raystown Lake Master Plan, 1994*, identified no significantly adverse cumulative environmental impacts from the implementation of the recommended facility improvements at each recreation site at Raystown Lake. The *Programmatic EA* evaluated cumulative impacts to the Raystown Lake project lands and also to the surrounding area. The development activities proposed under the Master Plan are expected to produce only minor and temporary impacts to project lands. The cumulative impacts to the surrounding area caused by known nonfederal development are expected to be minor and to complement rather than negate the beneficial impacts of the development proposed in the Master Plan.

Additional detail concerning individual and cumulative impacts of the other projects proposed under the Master Plan is presented in Section A.5 of the 1994 *Programmatic EA*.

5.17 Environmental Permits and Regulatory Compliance

A review of compliance with applicable federal statutes, executive orders, and executive memoranda has been conducted for the proposed project. The results of this compliance review are shown in Table E-1 in Appendix E. At this point in the study process, the Upper Corners project is in full compliance with all of the applicable federal statutes and executive orders or memoranda.

Development at Upper Corners will comply with all applicable federal, state, and local statutes. Developing any of the proposed facilities might require additional review and action for continued compliance with the Clean Water Act and the National Historic Preservation Act. State and local statutes and permits, including wetlands and soil and erosion control, also will require review and submittal if the project moves toward implementation. All appropriate permits will be obtained before construction activity begins.

WDCR978/033.DOC

6.0 CONCLUSIONS

The proposed action, construction, and operation of a conference center complex at Upper Corners, Raystown Lake, have been reviewed in accordance with NEPA, as implemented by the regulations of the CEQ (40 CFR 1500-1508) and ER 200-2. The proposed development was evaluated previously in the Programmatic EA that was prepared as part of the Raystown Lake Master Plan, 1994. This site-specific EA is intended as a supplement to the Programmatic EA. Relevant information from the Programmatic EA has been incorporated by reference, in accordance with 40 CFR 1502.20.

Most of the potential environmental impacts of development at Upper Corners are associated with potential development on moderately to severely erodible soil on steep slopes and with disruption of remote forest habitat. Effects on water quality, natural habitat, soil, and natural vegetation will be prevented or minimized by careful facility siting and by long- and short-term practices for erosion and sedimentation control.

The effects on existing land use, hunting, and passive recreation will be minimal because the total area necessary for development is small (80 to 150 acres) in comparison to the area for the entire site (1,030 acres). A large area surrounding the site also is available for these uses.

The effects on existing wildlife resources will be minimal because of the large amount of available habitat adjacent to Upper Corners. The effects may be minimized further by clustering development on the peninsula closest to Seven Points.

In coordination with the Pennsylvania SHPO, cultural investigations will be conducted for compliance with Section 106 of the National Historic Preservation Act.

The effect on air quality caused by increased vehicular traffic is expected to be minor. The proposed action would be in conformity with the State Implementation Plan as required by the Clean Air Act of 1990. Best management practices can be used to control fugitive dust during construction of the facilities and infrastructure, thereby reducing short-term construction-related effects on air quality.

Socioeconomic effects will be minimal. Development at Upper Corners will increase demand for law enforcement, fire fighting, outdoor rescue, and emergency medical services in the Raystown Lake area. These demands, however, are not expected to cause a significant strain on resources.

The following table summarizes potentially affected resources and methods for minimizing the effects.

Resources	Summary of Alternatives for Minimizing Effects
-----------	--

Wetlands	Delineate wetlands and prevent effects. If wetlands are to be affected, conduct 404(b)(1) analysis, obtain Section 404 permit (may require mitigation) and Water Quality Certification.
Steep Slopes (>20 percent)	Avoid development on steep slopes. Development on steep slopes will require a comprehensive plan for sediment and erosion control, stormwater-control measures, and additional infrastructure and may increase overall cost of construction.
Water Quality	Avoid development along shoreline, implement techniques for sediment and erosion control and stormwater control, revegetate disturbed areas, minimize impermeable surfaces, and minimize use of pesticides and fertilizers. Construction over 5 acres will require NPDES permit or Pennsylvania clean streams (Title 35) permit, or both.
Vegetation and Wildlife	Minimize removal of mature trees, cluster development, minimize area required for development, use native plants in landscaping designs.
Infrastructure	Construct new water and wastewater treatment plants rather than construct pipelines to existing offsite facilities. Minimize demand by including water-conservation features in design of the proposed facilities.
Cultural Resources	Avoid culturally sensitive areas. If cultural resources are to be affected, mitigation will be required.
Threatened and Endangered Species	Avoid effects on shale barrens, maintain protective buffer around shale barren areas, and control public access. If development is to affect potential habitat for northeastern bulrush, conduct survey and prevent effects.
Prime and Unique Farmlands	Complete form AD1006, "Farmland Conversion Impact Rating."

The proposed action will benefit the local economy by creating new jobs on the site and by

attracting more nonresident visitors to the region. The Upper Corners project is likely to account for a substantial part of the estimated increase in economic activity that is expected to be realized with the full implementation of the Raystown Lake Master Plan, 1994. Development of Upper Corners will not create disproportionately high or adverse human health or environmental impacts on minority or low-income populations of the surrounding community.

The no-action alternative was considered in this EA. Under the no-action alternative, the economic and recreational benefits expected from the proposed action would not be realized. Baseline conditions at the site would not be altered, and the site would remain available for future development. Other master-planning alternatives previously evaluated in the Programmatic EA and the Raystown Lake Master Plan, 1994, were incorporated by reference and were not considered further in this EA.

Because the proposed action is not expected to have significant individual or cumulative effects on the quality of the natural or human environment, the recommendation is that an environmental impact statement should not be prepared. Therefore, this EA satisfies the requirements for NEPA compliance, and a FONSI will be published and made available for a 30-day public review.

WDCR978/033.DOC

7.0 AGENCIES AND INDIVIDUALS CONSULTED

7.1 Consultation

The following federal, state, and local agencies and nongovernmental organizations were consulted in the preparation of this EA:

- Army Corps of Engineers, Raystown Lake Office
- Department of Agriculture, Natural Resource Conservation Service (Bellevue County and Somerset County, Pennsylvania)
- U.S. Environmental Protection Agency, Region III
- U.S. Fish and Wildlife Service
- Pennsylvania Department of Transportation
- Pennsylvania Game Commission, Bureau of Land Management
- Pennsylvania Department of Environmental Protection
- Pennsylvania Historical and Museum Commission, Bureau for Historic Preservation, Division of Archaeology and Protection
- Huntingdon County Planning Commission
- Valley Rural Electric Corporation
- Western Pennsylvania Conservancy

This action has been coordinated with appropriate federal, state, and local agencies. A mailing list of individuals and agencies is in Appendix D.

7.2 Public Involvement

There is strong public interest in how Raystown Lake is managed and developed. Members of the public have expressed an interest throughout the life of the project, beginning with the planning and construction of the reservoir, during the later planning and construction of the hydropower plant, during a water reallocation study in 1992, and being an integral part of updating the Raystown Lake Master Plan in 1993 and 1994.

The recommendations and findings of the *Raystown Lake Master Plan, 1994*, and the

Programmatic EA are the result of an extensive public involvement effort. The effort included informal scoping meetings, three newsletters, four public workshops held at different stages of the planning process, meetings with the Huntingdon County Planning Committee and the Bedford County Ambassador's Club, a focus group meeting with local representatives of federal and state environmental management agencies, congressional briefings, and a review of the development alternatives in the Master Plan Update by a Juniata College study team.

Because the proposed action being evaluated in this EA was both developed and presented to the public through the comprehensive public involvement process described above and because only a short time has passed since that effort was concluded, additional public meetings and newsletters were not produced for this EA.

A public notice asking for comments on the scope and issues to be covered by this EA was published on August 2, 1995. Several scoping comment letters were received in response (Appendix D).

The public and concerned organizations will be notified of the findings and conclusions of this EA through a 30-day public review of the EA. A copy of the "Notice of Availability" and the mailing list for this EA are in Appendix D.

WDCR978/033.DOC